# U.S. ARMY CORPS OF ENGINEERS CIVIL WORKS PROGRAM

# CONGRESSIONAL SUBMISSION FISCAL YEAR 2003

## GREAT LAKES AND OHIO RIVER DIVISION

Budgetary information will not be released outside the Department of the Army until 4 February 2002

## Justification of Estimates for Civil Function Activities Department of the Army, Fiscal Year 2003

## **GREAT LAKES AND OHIO RIVER DIVISION**

## Corps of Engineers

## Table of Contents

	Table of Contents	
۰		Page No.
Sur	veys:	
	Butler County, OH	7
	Columbus Metropolitan Area, Lower Big Darby Creek Basin Environmental Restoration, OH	
	Davidson County, Mill Creek Watershed, TN	
	Des Plaines, IL and WI (Phase II)	
	Fox River Environmental Dredging, WI	
	French Broad Watershed, TN	9
	Great Lakes Navigational Systems Study, MI, IL, IN, MN, NY, OH, PA and WI	
	Hocking River Basin Environmental Restoration, Monday Creek, OH	
	Hocking River Basin Environmental Restoration, Sunday Creek, OH	
	Indiana Harbor, IN	
	Ohio River Main Stem Systems Study, KY, IL, IN, PA and OH	
	Mahoning River Environmental Dredging, OH	16
	Metropolitan Louisville, Mill Creek Basin, KY	5
	Metropolitan Louisville, Southwest, KY	6
	Metropolitan Region of Louisville, Jefferson County, KY	11
	Muskingum Basin System, Dillon Lake, OH	17
	New River Basin, Stroubles Creek, VA	18
	Onondaga Lake, NY	
	Powell River Watershed, VA	19
Pre	construction Engineering and Design:	
	Ashtabula River Environmental Dredging, OH	27
	Chickamauga Lock, TN	
	Greenup Locks and Dam, Ohio River, KY and OH	
	Island Creek at Logan, WV	
	John T. Myers Locks and Dam, IN and KY	
	Waukegan Harbor, IL	
	······································	

## Justification of Estimates for Civil Function Activities Department of the Army, Fiscal Year 2003

## **GREAT LAKES AND OHIO RIVER DIVISION**

## Corps of Engineers

## Table of Contents (Continued)

	Page No.
Construction:	
Bluestone Lake, WV	161
Chicago Shoreline, IL	70
Dewey Lake, KY	
Indiana Harbor and Canal, Combined Disposal Facility, IN	34
Indianapolis, White River (North), IN	87
Kentucky Lock and Dam, Tennessee River, KY	40
Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY	136
Little Calumet River, IN	92
Locks and Dams 2, 3 and 4, Monongahela River, PA	48
London Locks and Dam, Kanawha River, WV	
Marmet Locks and Dam, WV	
McAlpine Locks and Dam, KY and IN	
McCook and Thornton Reservoirs, IL	
Metropolitan Louisville, Beargrass Creek, KY	
Metropolitan Louisville, Pond Creek, KY	
Metropolitan Region of Cincinnati, Duck Creek, OH	
Mill Creek, OH	
Mississinewa Lake, IN	
Ohio River Greenway Public Access, IN	
Olmsted Locks and Dam, IL and KY	
Presque Isle Peninsula, PA	
Robert C. Byrd Locks and Dam (formerly Gallipolis Locks and Dam), WV and OH	59

### Justification of Estimates for Civil Function Activities Department of the Army, Fiscal Year 2003

## **GREAT LAKES AND OHIO RIVER DIVISION**

## Corps of Engineers

## Table of Contents (Continued)

<u></u>	Page No.
Construction (continued)	J
Saw Mill Run, Pittsburgh, PA	131
West Columbus, OH	
Winfield Locks and Dam, WV	65
Operation and Maintenance:	170

## Justification of Estimates for Civil Function Activities Department of the Army, Corps of Engineers Fiscal Year 2003

## SUMMARY, GREAT LAKES AND OHIO RIVER DIVISION

	FY 2002	FY 2003	Increase or
General Investigations	<u>Allocation</u>	<u>Request</u>	<u>Decrease</u>
Surveys	6,082,000	6,668,000	+586,000
Preconstruction Engineering and Design	5,384,000	3,957,000	-1,427,000
Subtotal, General Investigations	11,466,000	10,625,000	-841,000
Construction General			
Construction	307,052,000 1/	240,606,000 2/	-66,446,000
Dam Safety Assurance	16,528,000	16,194,000	-334,000
Subtotal, Construction General	323,580,000	256,800,000	-66,780,000
Operation and Maintenance			
Project Operation	170,362,000	171,814,000	+1,452,000
Project Maintenance	163,236,000	177,429,000	+14,193,000
Subtotal, Operation and Maintenance	333,598,000	349,243,000	+15,645,000
Grand Total, Great Lakes and Ohio River Division	668,664,000	616,668,000	-51,976,000

<sup>1/</sup> Includes an estimated \$68,306,000 to be derived from the Inland Waterways Trust Fund in FY 2002.

<sup>2/</sup> Includes an estimated \$85,610,000 to be derived from the Inland Waterways Trust Fund in FY 2003.

### Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
1. SURVEYS - NEW: None.					
2. SURVEYS - CONTINUING:					
a. Navigation Studies.					
Ohio River Main Stem Systems Study, KY, IL, IN, PA, WV and OH Louisville District	50,300,000	42,970,000	1,587,000	3,000,000	2,743,000

The study is an inland navigation systems analysis to address the level of investments needed to provide an efficient navigation system on the Ohio River Main Stem. The study will identify the maintenance, major maintenance, major rehabilitation and new construction investment needs for the navigation locks and dams along the Ohio River Main Stem. These structures are crucial to the orderly development of navigation throughout the Ohio River Basin. As traffic grows through the Ohio River Valley, several lock structures will experience increasing delays, which may be particularly severe during times of maintenance (when the existing chambers must be closed for routine or emergency repairs or accidents). Other locks may become increasingly unreliable due to age and cycles of use. Any closure of the main locks will result in severe traffic impacts. For the past ten years, traffic on the Ohio River has grown at an annual average rate of 2.0 percent. In 1999, total tonnage reached 241 million tons, reflecting a 22 percent increase over 1987. Energy-related commodities comprised 62 percent of the total tonnage, with aggregates and steel commodities contributing 18 percent and 7 percent, respectively. In 2030, total tonnage is projected to reach 370 million tons.

The study is investigating the economic, social, and environmental impacts of both large scale investments and small scale improvements. Large scale improvements could involve constructing a new lock chamber at certain facilities, lengthening existing 600' chambers to provide at least two 1200' chambers, or provision of replacement locks and dams at older facilities (such as Emsworth, Dashields, or Montgomery Locks and Dams). Small scale improvements could include installation of permanent mooring cells near lock approach points (which could enhance tow mooring in queuing situations and possibly speed up double-cut processing), providing spare lock gates, new procedures to speed up lock maintenance, and other infrastructure or procedural opportunities that could be identified during the study. The study has also addressed ecosystem restoration opportunities.

FY 2002 funds are being used to continue engineering, economic, and environmental system analyses, and efforts on the System Investment Plan (a plan of major Ohio River mainstem navigation investments through 2060) and the Cumulative Effects Assessment (an evaluation of cumulative impacts to environmental resources in and along the mainstem of the Ohio River). FY 2003 funds will be used to continue engineering, economic, and environmental system analyses incorporating the system-wide cumulative effects assessment and enhanced economics evaluation into the System Investment Plan. The study is scheduled for completion in March 2005.

4 February 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Great Lakes Navigational System, MI, IL, IN, MN, NY, OH, PA and WI Detroit District.	11,079,000	579,000	500,000	375,000	9,625,000

In 1999 Congress provided a broad-range authority to review the feasibility of improving commercial navigation on the Great Lakes/ St. Lawrence Seaway navigation system including locks, dams, harbors, ports, channels, and other related features. The Great Lakes together with the St. Lawrence Seaway provides a continuous 2,400-mile deep draft waterway that extends from the western end of Lake Superior to the Gulf of St. Lawrence. The waterway is contiguous to eight Great Lakes states and the provinces of Ontario and Quebec and home to almost 100 million people. The Great Lakes/St. Lawrence Seaway system has an enormous impact on the North American economy. The system provides a catalyst for billions of dollars of capital investment and industrial growth to both the United States and Canada. The study will be cost-shared by the United States and Canadian Governments in partnership with the St. Lawrence Seaway Development Corporation (U.S.) and the St. Lawrence Seaway Management Corporation (Canada). The Feasibility Cost Sharing Agreement is scheduled to be executed in September 2002. The focus of the study will be the Great Lakes connecting channels, the Welland Canal and the St. Lawrence River from Montreal to Lake Ontario. The study will investigate the economic, social and environmental impacts of both large and small-scale capital improvements to the system. Large-scale improvements could involve constructing new locks and the system-wide deepening of channels. Small-scale improvements could include new procedures to facilitate lock maintenance, and selective deepening of channels, and revised procedures for maintaining navigational aids. The study will also address ecosystem restoration opportunities.

FY 2002 funds will be used to complete the reconnaissance phase. If the reconnaissance report is certified to be in accordance with policy, FY 2003 funds will be used to continue into the feasibility phase. The feasibility phase will evaluate ordinary maintenance, major maintenance, major rehabilitation and new construction investment needs for the entire system required to maintain a viable navigation system on the Great Lakes and St. Lawrence Seaway. The estimated cost of the feasibility phase is \$20,000,000, which will be cost shared on a 50-50 basis by the United States and Canadian Governments. A summary of cost sharing is as follows:

Total Estimated Study Cost	21,079,000
Reconnaissance Phase (Federal)	1,079,000
Feasibility Phase (Federal)	10,000,000
Feasibility Phase (Non-Federal)	10,000,000

The reconnaissance phase is scheduled for completion in September 2002. The feasibility phase is scheduled for completion in September 2006.

TOTAL: Navigation Studies 61,379,000 43,549,000 2,087,000 3,375,000 12,368,000

4 February 2002 3

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
b. Flood Damage Prevention Studies.					
Des Plaines River, IL and WI (Phase II) Chicago District	4,500,000	333,000	252,000	335,000	3,580,000

The Des Plaines River Basin starts in southwest Wisconsin and flows south into northeast Illinois. The study area, located in Lake and Cook Counties in northeastern Illinois and Kenosha County in southeast Wisconsin, has a drainage area of approximately 630 square miles. The Des Plaines River has a long history of flooding which has caused significant economic losses. The maximum flood of record, in September 1986, caused an estimated \$35,000,000 in damage to 10,000 dwellings and 263 business and industrial sites and severely impacted the entire transportation network in the Chicago metropolis (air, rail, and road). Section 419 of the Water Resources Development Act of 1999 directs that the Corps not exclude from consideration and evaluation flood damage reduction measures based on restrictive policies regarding the frequency of flooding, the drainage area, and the amount of runoff. Complementary to flood damage reduction, this study emphasizes formulating plans along the main stem and on 15 tributaries in both Illinois and Wisconsin that include environmental restoration and protection, improved water quality, and related recreation opportunities in this rapidly urbanizing portion of the Chicago area. The Illinois Department of Natural Resources provided a letter of intent in January 2000. The Feasibility Cost Sharing Agreement is scheduled to be executed in February 2002.

The preliminary estimated cost of the feasibility phase is \$9,000,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of the cost sharing is as follows:

Total Estimated Study Cost	\$9,000,000
Feasibility Phase (Federal)	4,500,000
Feasibility Phase (Non-Federal)	4,500,000

FY 2002 and FY 2003 funds will be used to continue the feasibility study. The feasibility study is scheduled for completion in August 2007.

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Metropolitan Louisville, Mill Creek Basin, KY Louisville District	850,000	100,000	75,000	187,000	488,000

The study area is located within the Mill Creek watershed in southwest Jefferson County, Kentucky. The study area is protected from flooding from the Ohio River by the Southwest Jefferson County Flood Protection system, which was completed in the late 1980's. However, there are nearly 3,300 homes and businesses, with an estimated value in excess of \$100 million, that are still subject to flooding from local streams. Approximately 3.5 square miles, or 10 percent, of the basin's entire drainage area is located in the designated floodplain. The most recent flooding in the basin occurred in August 1992. Damages for this flood, estimated to have a recurrence interval of 10 to 20 years, were in excess of \$1,000,000. During the flood of record in March 1964, approximately 900 residential properties were damaged. The study will evaluate solutions to the flooding problems. The solutions being considered are detention basins, as well as channel modifications, earth levees, and non-structural measures. The non-Federal sponsor for this study is the Louisville and Jefferson County Metropolitan Sewer District (MSD). MSD indicated by letter, dated 9 February 1996, that flooding in the Mill Creek Basin is one of its priority problem areas and that they understand the cost sharing requirements for the feasibility phase. The Feasibility Cost Sharing Agreement is scheduled to be executed in April 2002.

FY 2002 funds are being used to initiate the feasibility study efforts consisting of hydrologic and hydraulic analysis, economic analysis, preliminary design of the alternatives. FY 2003 funds will be used to continue feasibility study efforts consisting of an engineering, economic, and environmental analysis of the flood damage reduction components. The estimated cost of the feasibility phase is \$1,500,000, which is cost shared on a 50-50 basis by the Federal Government and the non-Federal sponsor. Up to one-half of the non-federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (non-Federal)	750,000

The reconnaissance phase is scheduled for completion in April 2002. The feasibility phase is scheduled for completion in September 2005.

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Metropolitan Louisville, Southwest, KY Louisville District	1,924,000	1,474,000	200,000	140,000	110,000

The Metropolitan Louisville, Southwest, study area encompasses a drainage area of approximately 24 square miles including the west and south ends of Louisville, Kentucky. The highly urbanized flood plain includes the main campus area of the University of Louisville, the commonwealth's second largest university, as well as the Churchill Downs neighborhood, site of historic Churchill Downs race course. The frequency of flooding has increased over the last few years as a result of overland and combined storm sewer overflows. Components of the existing local flood protection project are inadequate at high Ohio River stages. Flooding occurred in the study area in 1983, 1989, August 1992 (which included loss of life), and most recently in March 1997 when more than 5,000 residential and commercial structures, the Kentucky Fair and Exposition Center, the area around Churchill Downs, and the main campus of the University of Louisville were damaged. Average annual damages in the study area exceed \$5,000,000. The Louisville and Jefferson County Metropolitan Sewer District (MSD) is a strong local sponsor. MSD executed the Feasibility Cost Sharing Agreement in June 1999.

The reconnaissance report recommended initiation of feasibility phase studies which would evaluate operational modifications and/or physical improvements to the pump stations located on the Ohio River associated with the existing Federally constructed flood damage prevention project. FY 2002 funds are being used to continue feasibility study efforts consisting of environmental studies, formulation of the recommended plan, and design and cost estimates of plan components; and, completing the hydrologic and economic evaluation of project alternatives. FY 2003 funds will be used to continue the feasibility study efforts. The estimated cost of the feasibility phase is \$2,600,000, which is cost shared on a 50-50 basis by the Federal Government and the non-Federal sponsor. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,224,000
Reconnaissance Phase (Federal)	624,000
Feasibility Phase (Federal)	1,300,000
Feasibility Phase (Non-Federal)	1,300,000

The reconnaissance phase was completed in June 1999. The feasibility phase completion date is scheduled for March 2004.

4 February 2002

Great Lakes and Ohio River Division

7

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Butler County, OH, Louisville District	850,000	100, 000	43,000	243,000	464,000

The study area consists of Butler County, located in southwestern Ohio. Butler County covers approximately 513 square miles. The study area is primarily drained by the Great Miami River and its tributaries (Seven Mile Creek, Four Mile Creek, and Indian Creek). In addition, the upper reaches of Mill Creek are located in the southeastern part of the county. In October 1989, the unincorporated areas of the county joined the National flood insurance program. The unincorporated areas cover almost 75 percent of the county. The most recent flooding occurred in March 1997, during which several communities suffered damages. Within the watershed approximately 1,200 homes and businesses, plus public facilities are subject to flood damages. Damages in 1997 were estimated at \$20 million. Possible flood damage reduction measures include channel modification, clearing and snagging, detention basins, small flood damage reduction reservoirs and non-structural measures. This study will also assess opportunities for ecosystem restoration and restoration of wetlands. The Feasibility Cost Sharing Agreement with the Butler County, Ohio, Department of Development is scheduled to be executed in March 2002.

FY 2001 funds were used to initiate and complete the reconnaissance phase of the study. FY 2002 funds are being used to initiate the feasibility study efforts consisting of hydrologic and hydraulic analysis, economic analysis, soil borings, design of the alternatives, real estate estimates, and cost estimates. FY 2003 funds will be used to continue the feasibility study efforts consisting of economic analysis, design of the alternatives, real estate estimates and cost estimates. The estimated cost of the feasibility phase is \$1,500,000, which is cost shared on a 50-50 basis by the Federal Government and the non-Federal sponsor. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (non-Federal)	750,000

The reconnaissance phase is scheduled for completion in March 2002. The feasibility phase is scheduled for completion in September 2005.

4 February 2002

### Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Davidson County, Mill Creek Watershed, TN Nashville District	860,000	110,000	66,000	240,000	444,000

Mill Creek is a major tributary of the Cumberland River in southeastern Davidson County and northwestern Williamson County. The Mill Creek watershed is 108 square miles and home to the federally listed endangered Nashville Crayfish. A recurrence of the May 1979 flood of record would cause an estimated \$93,000,000 in flood damages today. Over 1,000 homes and businesses are subject to flooding. Corrective measures evaluated during the reconnaissance study include nonstructural measures, wetland restoration and enhancement to promote biodiversity. These outputs will be further refined during the feasibility phase. The sponsor is the Metropolitan Government of Nashville and Davidson County. The sponsor understands its cost sharing responsibilities and has expressed an interest in cost sharing the feasibility phase, by letter of intent dated March 2001. The Feasibility Cost Sharing Agreement is scheduled to be executed in July 2002.

FY 2002 funds will be used to initiate the feasibility phase. FY 2003 funds will be used to continue the feasibility phase. The estimated cost of the feasibility phase is \$1,600,000, which is to be shared on a 50-50 basis by Federal and non-Federal interests. A summary of study cost sharing follows:

\$1,610,000
110,000
750,000
750,000

The reconnaissance phase is scheduled for completion in July 2002. The feasibility study is scheduled for completion September 2004.

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
French Broad Watershed, TN Nashville District	907,000	467,000	176,000	205,000	59,000

The French Broad watershed encompasses 5 east Tennessee counties: Knox, Blount, Jefferson, Sevier and Cocke. New economic development has stimulated growth. With this has come a need for a complete evaluation of the region's environmental infrastructure including flood control, water supply, wastewater treatment, fish and wildlife enhancement, water quality, and ecosystem restoration. A Major flood in 1994 damaged over 300 residences, motels, and businesses. On April 14, 1994, federal disaster assistance was approved for five of the hardest-hit Tennessee counties, including Blount, Sevier, Unicoi, Polk and Hamilton counties. Assistance in Sevier County included \$352,000 for 130 temporary housing units, \$509,630 to repair damage to infrastructure, \$2,397,300 in SBA home loans and \$2,042,000 in SBA business loans. The reconnaissance study evaluated opportunities for flood control improvements and ecosystem restoration. The watershed harbors several federally listed endangered species, such as the Peregrine falcon, Northern river otter, and the Orange-foot pimpleback. Corrective measures to be refined during feasibility phase studies include both structural and nonstructural flood damage reduction measures consisting of floodwater detention ponds (dry dams), levees and floodwalls, as well as wetland restoration and enhancement to promote biodiversity. The sponsors for this project include the cities of Pigeon Forge, Gatlinburg, Sevierville, and Sevier County. Each understands its cost sharing responsibilities and has expressed an interest in cost sharing the feasibility phase, by letters of intent dated November 24, 1998. The Feasibility Cost Sharing Agreement was executed on October 11, 2000.

FY 2002 and FY 2003 funds will be used to continue the feasibility study. The estimated cost of the feasibility phase is \$1,614,000, which is to be shared on a 50-50 basis by Federal and non-Federal interests. A summary of study cost sharing follows:

Total Estimated Study Cost	\$1,714,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	807,000
Feasibility Phase (Non-Federal)	807,000

The reconnaissance phase was completed in October 2000. The completion of the feasibility study is December 2003.

TOTAL: Flood Damage Prevention Studies 9,891,000 2,584,000 812,000 1,350,000 5,145,000

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
c. Shoreline Protection Studies - None.					
d. Special Studies.					
Indiana Harbor, IN Chicago District	3,100,000	174,000	315,000	248,000	2,363,000

The study area is located in northwest Indiana in the communities of Gary, East Chicago, and Hammond. The study area covers 15.4 river miles, including the Indiana portion of the Grand Calumet River (with the exception of an area to be cleaned up by United States Steel) and the portions of the Lake George Canal and the Calumet Canal that are not part of the federal navigation channel. This area contains approximately two million cubic yards of bottom sediments that are highly contaminated with polynuclear aromatic hydrocarbons, metals (including lead and chromium), and PCB's (below the Toxic Substance Control Act level), causing it to be designated an Area of Concern in the Great Lakes Water Quality Agreement. The Grand Calumet River/Indiana Harbor is a high priority clean-up area for the Indiana Department of Environmental Management, and the Feasibility Cost Sharing Agreement is scheduled to be executed in April 2002.

FY 2001 funds are being used to complete the reconnaissance phase and initiate the feasibility phase of the study. FY 2002 and FY 2003 funds will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$6,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$6,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	3,000,000
Feasibility Phase (Non-Federal)	3,000,000

The reconnaissance phase is scheduled for completion in April 2002. The feasibility study is scheduled for completion in September 2007.

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Metropolitan Region of Louisville, Jefferson County, KY Louisville District	850,000	100,000	75,000	225,000	450,000

The study area covers approximately 386 square miles and includes the metropolitan region of Louisville and extends over six counties: north central Kentucky (Jefferson, Oldham and Bullitt) and south central Indiana (Clark, Floyd and Harrison). The study area is drained by the Ohio River, Salt River, Pond Creek, Floyds Fork, Harrods Creek, Beargrass Creek, and Mill Creek in Kentucky, and Silver Creek in Indiana. Federally constructed projects in the area that have directly impacted the environment include the Louisville, Kentucky, Floodwall, the Southwest Jefferson County Levee and Floodwall, and McAlpine Locks and Dam. Most of Jefferson County was historically riparian, and there are many small waterways with floodplains and riparian corridors in varying states of degradation and development. In particular, the wall and levee systems of Louisville have blocked the natural Ohio River overflows, which naturally recharged wetland areas. Habitat will be restored for endangered species, such as the gray and Indiana bats, and for locally threatened species such as the Louisville crayfish. Drainage and flood damage reduction efforts will be linked to restoration of natural floodplain values through the restoration of wetlands and riparian overbank areas, serving as flood water attenuation and storage areas. Habitat improvement measures, water control structures, moist soil management units, and reforestation will be analyzed. The Feasibility Cost Sharing Agreement with the Louisville and Jefferson County Metropolitan Sewer District (MSD) is scheduled to be executed in April 2002.

FY 2002 funds are being used to initiate the feasibility study efforts consisting of hydrologic and hydraulic analysis, economic analysis, and preliminary design of the alternatives. FY 2003 funds will be used to continue the feasibility study efforts. The estimated cost of the feasibility phase is \$1,500,000, which is cost shared on a 50-50 basis by the Federal Government and the non-Federal sponsor. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (non-Federal)	750,000

The reconnaissance phase is scheduled for completion in April 2002. The feasibility phase is scheduled for completion in September 2005.

Great Lakes and Ohio River Division

Study		Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Onondaga Lake, NY Buffalo District	(Partnership)	7,996,000	1,472,000	336,000	300,000	5,888,000

Onondaga Lake, which is part of the New York State Barge Canal System and Oswego River Basin, has a total drainage area of 245 square miles and a surface area of 4.6 square miles. The city of Syracuse is located along the south shore of the lake. Major tributaries to the lake are Onondaga Creek, Ninemile Creek and Ley Creek. The major water resource problem associated with the lake is its degraded water quality. Currently, there is a ban on swimming and on the consumption of fish caught in the lake. The poor water quality deters optimal use and economic growth of the surrounding area.

The Onondaga Lake Partnership was authorized under Section 573 of the Water Resources Development Act of 1999. The WRDA 1999 legislation directs the Corps to establish a partnership with other federal, state, and local agencies to develop and implement lake and watershed improvement projects. The WRDA 1999 authorizes the Corps to plan, design, and construct projects for the environmental restoration, conservation, and management of Onondaga Lake.

FY 2002 funds are being used to lead, administer, and manage the Onondaga Lake Partnership.

FY 2003 will be used to continue partnership activities consisting of providing technical and outreach expertise, soliciting, scoping, scheduling, and cost-estimating future projects, tracking progress of existing projects, negotiating with potential sponsors, and investigating and overcoming legal, contractual, regulatory, and technical obstacles to improving Onondaga Lake and its watershed.

4 February 2002

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Columbus Metropolitan Area, Lower Big Darby Creek Basin Environmental Restoration, OH Huntington District	1,425,000	25,000	20,000	100,000	1,280,000

The study area encompasses the Big Darby Creek Basin located in the central part of Ohio within the counties of Pickaway, Franklin, Madison, Union, Logan, Champaign and Clark Counties. The Big Darby Creek Basin is approximately 40 miles long and 18 miles wide with a drainage area of 557 square miles. Big Darby Creek is a tributary of the Scioto River, which in turn is a tributary of the Ohio River. Little Darby Creek is the largest tributary and has a drainage area of 176 square miles or 31.5 percent of the total drainage area. Big Darby Creek represents one of the most biologically diverse aquatic systems in the Midwest, supporting more than 100 species of fish and 38 species of mussels. The watershed provides habitat for 14 species classified by the state or Federal government as endangered and 98 threatened or potentially threatened. Stresses to the Darby ecosystem result primarily from agricultural and expanding urban development. Sediment, nutrient and chemical loading from agricultural fields and the stormwater runoff from urbanizing areas represent the primary threats from an aquatic habitat and water quality perspective. Large intense pulses of water entering both the tributaries create threats from a hydrologic perspective. Such pulses can result in downstream flooding, the destabilization of stream banks, and the disruption of both streambed and riparian habitats. Possible solutions include wetland creation, restoration of aquatic habitat, and hydrologic modeling that can be used as a management planning tool for evaluating future development. The City of Columbus, Ohio Environmental Protection Agency, and Ohio Department of Natural Resources have expressed interest in being the cost sharing sponsor. The reconnaissance report was certified to be in accord with policy in July 2000. The Feasibility Cost Sharing Agreement is scheduled for execution in August 2002.

FY 2002 funds will be used to initiate the feasibility phase of the Lower Big Darby Creek study. FY 2003 funds will be used to continue work on the feasibility study. The preliminary estimated cost of the feasibility phase is \$2,800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,825,000
Reconnaissance Phase (Federal)	25,000
Feasibility Phase (Federal)	1,400,000
Feasibility Phase (Non-Federal)	1,400,000

The reconnaissance phase is scheduled for completion in August 2002. The feasibility study is scheduled for completion in September 2005.

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Hocking River Basin Environmental Restoration, Monday Creek, OH Huntington District	556,000	239,000	112,000	205,000	0

The Monday Creek watershed of the Hocking River basin study area encompasses 116 square miles of Perry, Athens, and Hocking Counties, Ohio. The focus of the study for the Monday Creek watershed is environmental restoration. Extensive portions of the Monday Creek watershed, of the Hocking River drainage area, have been subjected to underground and surface mining. Severe acid mine drainage and erosion from disturbed land areas have accelerated sedimentation in over 100 miles of streams of the area. A number of stream reaches are essentially sterile and unable to support diverse aquatic life. Communities affected within this environmentally degraded watershed are Nelsonville, Buchtel, Murray City, Carbon Hill, New Straightsville, Gore, Greendale, Maxville, and Bristol. The study is evaluating the applicability and feasibility of various restoration solutions to the overall degradation of the ecosystem. Environmental restoration activities include limited stream restoration, wetland creation and wildlife habitat restoration involving both active and passive treatment of acid mine drainage. The Ohio Department of Natural Resources, Division of Mines and Reclamation signed the Feasibility Cost Sharing Agreement for the project on April 27, 2000.

FY 2002 funds are being used to continue the feasibility phase of the study. FY 2003 funds will be used to complete the feasibility study. The estimated cost of the feasibility phase is \$1,012,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,062,000
Reconnaissance Phase (Federal)	50,000
Feasibility Phase (Federal)	506,000
Feasibility Phase (Non-Federal)	506,000

The reconnaissance phase was completed in April 2000. The feasibility phase is scheduled for completion in September 2003.

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Hocking River Basin Environmental Restoration, Sunday Creek, OH Huntington District	426,000	50,000	126,000	225,000	25,000

The Sunday Creek watershed of the Hocking River basin study area encompasses 139 square miles of Perry, Athens, and Morgan Counties, Ohio. The focus of the study for the Sunday Creek watershed is environmental restoration. Extensive portions of the Sunday Creek watershed, of the Hocking River drainage area, have been subjected to underground and surface mining. Severe acid mine drainage and erosion from disturbed land areas have accelerated sedimentation in over 110 miles of streams of the area. A number of stream reaches are essentially sterile and unable to support diverse aquatic life. Communities affected within this environmentally degraded watershed are Chauncey, Mill Field, Jacksonville, Tremble, Glouster, Corning, Rendville, Shawnee, and Hemlock. The reconnaissance report was certified to be in accord with policy in November 1997. The study is evaluating the applicability and feasibility of various restoration solutions to the overall degradation of the ecosystem. Environmental restoration activities include limited stream restoration, wetland creation and wildlife habitat restoration involving both active and passive treatment of acid mine drainage. The Ohio Department of Natural Resources, Division of Mines and Reclamation understands its cost sharing responsibilities and has indicated intent to share equally in the feasibility study phase by providing a letter of intent dated October 28, 1996. The Ohio Environmental Protection Agency (OEPA) also has indicated its interest in the restoration project. The Feasibility Cost Sharing Agreement is scheduled to be executed in February 2002.

FY 2002 funds are being used to initiate the feasibility phase of the study. FY 2003 funds will be used to continue the feasibility study. The estimated cost of the feasibility phase is \$752,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$802,000
Reconnaissance Phase (Federal)	50,000
Feasibility Phase (Federal)	376,000
Feasibility Phase (Non-Federal)	376,000

The reconnaissance phase is scheduled for completion in February 2002. The feasibility study is scheduled for completion in September 2004.

4 February 2002

15

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Mahoning River Environmental Dredging, OH Pittsburgh District.	2,000,000	500,000	189,000	40,000	1,271,000

The Mahoning River Basin covers approximately 1,132 square miles in northeastern Ohio and west-central Pennsylvania. More than 750,000 people live within the basin along the study reach of Trumbull and Mahoning Counties, Ohio, and Lawrence County, Pennsylvania. Local interests from both Ohio and Pennsylvania have requested comprehensive evaluations to remove and remediate contaminated sediments from the river. The studies are being conducted under the authority of Section 312 of the Water Resources Development Act of 1990, as amended, which provides for removal and remediation of contaminated sediments within navigable waters for the purpose of ecosystem restoration. This feasibility study only includes the Ohio portion of the Mahoning River which is approximately 31 miles of the lower Mahoning River from Leavitsburg, Ohio (river mile 46.0), through Warren and Youngstown, Ohio, to the Ohio-Pennsylvania border (river mile 12.0). Deposition of uncontrolled industrial era residue from nine major Mahoning River valley steel plants, which lined the riverbanks throughout the lower 31-mile reach of the Mahoning River, has resulted in the degradation of the aquatic ecosystem and has become a threat to public safety and health as evidenced by the Human Health Advisory (HHA) issued by the Ohio Department of Health. The HHA includes warnings cautioning against contact with the sediments and restricting fish consumption. This study will investigate alternatives and provide recommendations to restore over 31 miles of water and related land resources back to a baseline condition determined to be just upstream of the study reach at a USGS Gage Station (river mile 46.0) in Leavitsburg, Ohio. Possible solutions include the removal of in-river contaminated sediments, removal of in-river and riverbank contaminated sediments, or a combination thereof, coupled with bioremediation of in-situ contaminated sediments. The local communities throughout the study reach in Ohio have all expressed support for the study.

The Feasibility Cost Sharing Agreement is scheduled for execution in February 2002. Eastgate Regional Council of Governments, a state COG, will be the local sponsor. FY 2001 carry-over funds are being used to complete a project study plan and execute a feasibility cost sharing agreement. FY 2002 funds will be used to initiate the feasibility phase. FY 2003 will be used to continue the feasibility phase. The estimated cost of the feasibility phase is \$3,000,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the cost sharing is as follows:

Total Estimated Study Cost	\$3,500,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase is scheduled for completion in February 2002. The feasibility study is scheduled for completion in September 2005.

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Muskingum Basin System, Dillon Lake, OH Huntington District	575,000	100,000	190,000	225,000	60,000

The Muskingum River Lakes system includes 16 completed projects, regulating the runoff of a drainage area of 5,060 square miles, or 63 percent of the entire basin area. Mining is still prevalent within the basin. The original reservoir system, consisting of 14 projects (now between 60 and 63 years old), was completed in 1938. Two more projects were constructed and completed in 1959 and 1972. The 14 original projects are operated for flood control, recreation, and water conservation. The two newer projects are operated for flood control, general recreation, F&WL conservation, and low flow augmentation. The reconnaissance study focused on five areas of concern: the flood control system, floodplain management, environmental restoration, recreation, and water supply. A number of potential projects were identified under each category. The section 905(b) reconnaissance report was certified to be in accord with policy in May 2001. The feasibility study will address Dillon Lake. The environment of the upper reaches of the lake are significantly impacted by sedimentation. The aquatic habitat is degraded, benthos impacted and fisheries are impaired. In addition there are impacts to existing recreation facilities. The feasibility study will include alternatives primarily directed toward improving the sediment retention function of the lake, including improving the handling efficiency of arriving sediments, protection of wetlands, improving fishery, and creating additional wetlands for the fine sediment filtration. Incidental benefits of the project would include enhanced aesthetics and improved recreational opportunities. The Ohio Department of Natural Resources (ODNR) has agreed to serve as the study sponsor. ODNR understands its cost sharing responsibilities and has indicated its intent to cost share in the feasibility study by letter dated January 11, 2001. The Feasibility Cost Sharing Agreement is scheduled to be executed in February 2002.

FY 2002 funds are being used to initiate the feasibility study. FY 2003 funds will be used to continue the feasibility study. The estimated cost of the feasibility phase is \$950,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,050,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	475,000
Feasibility Phase (Non-Federal)	475,000

The reconnaissance phase is scheduled for completion in February 2002. The feasibility study is scheduled for completion in September 2004.

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
New River Basin, Stroubles Creek, VA Huntington District	900,000	100,000	126,000	235,000	439,000

The New River Basin Reconnaissance Study Report, dated October 2000, evaluated the potential for Federal interest in implementing solutions to flooding, ecosystem degradation and other related water resource problems and opportunities in the New River Basin. The report was certified to be in accord with policy in June 2001. One of the locations where potential Federal projects were identified, and which has significant non-Federal support, is the Stroubles Creek watershed. The Stroubles Creek Watershed is located in Montgomery County, Virginia and lies partially within the cities of Radford and Blacksburg, Virginia. The watershed contains approximately 24 square miles and drains a variety of residential, commercial, institutional, farmland and forested lands. Several areas within the watershed are experiencing flood damage from relatively low frequency storm events. First floors of structures on the Virginia Tech campus including the War Memorial Gymnasium and the Donaldson Brown Hotel and Conference Center were damaged in May 1992 (\$4,500,000 in flood damages). These facilities are suffering repeated damages during flood events and several areas of the watershed are experiencing severe channel erosion due to high flood flows. The Town of Blacksburg, Virginia, has constructed several retention basins in the watershed, but flood damages continue to occur. In terms of aquatic and environmental restoration, Stroubles Creek is included on the Commonwealth of Virginia's 1998 303(d) Impaired Waters List with ongoing deterioration of the stream's benthic community due to non-point sources in the watershed. The principle purpose of the feasibility study will be to further identify alternatives to assess the extent of ongoing damages to the stream corridor environment due to high flows and non-point source run-off. Given the characteristics of the watershed, flood damage reduction measures such as stream channel modifications and nonstructural floodproofing and relocations will likely be evaluated. The district received

FY 2002 funds will be used to initiate into the feasibility study. FY 2003 funds will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$1,600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing follows:

Total Estimated Study Cost	\$1,700,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	800,000
Feasibility Phase (Non-Federal)	800,000

The reconnaissance phase is scheduled for completion in March 2002. The feasibility study is scheduled for completion in September 2005.

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Powell River Watershed, VA Nashville District	1,477,000	1,154,000	63,000	100,000	160,000

The Powell River originates in southeast Virginia and flows southwest across the Tennessee border, where it empties into the Clinch River. Restoring the damaged portions of this unique ecosystem will benefit the eleven endangered mussel species and two threatened fish species. The Powell River Watershed Project Study Plan identified 12 contaminated creeks that contribute to the ecosystem degradation of the Powell River watershed. These creeks will be evaluated in 3 interim feasibility reports that will develop a watershed management plan containing potential corrective measures. The interim feasibility reports will evaluate measures which provide modification of hydrology or substrate by eliminating heavy metals in the water and increasing the ph of the water to normal levels through use of active (filtration) and passive (weirs, impoundment and wetland creation) systems for restoration of the ecosystem. The Lee-Norton-Wise-Scott-Planning District Commission (LENOWISCO), by letter of intent dated November 26, 1996, indicated an interest in cost-sharing the feasibility study. The Feasibility Cost Sharing Agreement was executed on July 20, 1998. The Ely and Puckett Creeks interim report was completed in May 2000. The interim report for Straight, Reeds, Jones, and Cox Creeks will be completed in December 2002. The interim report on Bundy Creek, Craborchard Creek, Pigeon Creek and Jordan Branch is scheduled for completion in September 2004.

FY 2002 funds are being used to continue the Straight, Reeds, Jones and Cox Creeks interim report and initiate the Bundy Creek, Craborchard Creek, Pigeon Creek and Jordan Branch interim report. FY 2003 funds will be used to complete the Straight, Reeds, Jones and Cox Creeks interim report and continue the Bundy Creek, Craborchard Creek, Pigeon Creek and Jordan Branch interim report. The estimated cost of the feasibility phase is \$2,754,000 which is to be shared on a 50-50 basis by Federal and non-Federal interests. A summary of study cost sharing follows:

\$2,854,000
100,000
1,377,000
1,377,000

The completion of the final feasibility study is scheduled for September 2004.

Great Lakes and Ohio River Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Fox River Environmental Dredging, WI Detroit District	850,000	100,000	0	40,000	710,000

The study will investigate environmental dredging and iother water related resource problems and needs on the Fox River and Green Bay Harbor located in northeastern Wisconsin. The study area encompasses the Lower Fox River which is defined as that 39-mile segment of the Fox River beginning at the mouth of Lake Winnebago, and terminating at the mouth of Green Bay. The ecosystem of the Fox River has been severely degraded in a number of locations by several factors. The primary source of degradation has been various industries discharging wastewater into the Fox River over a period of many years. The Fox River is contaminated with polychlorinated biphenyl (PCB), and the Wisconsin Department of Natural Resources (WDNR), Bureau of Watershed Management, is currently considering various cleanup options, which would involve environmental dredging. Preliminary evaluation by the WDNR estimates there are approximately 2,000,000 cubic yards of contaminated sediment within the Lower Fox River system to be addressed under the study. The WDNR's feasibility study report is expected to be completed in 2002. The Corps will use the results obtained by the WDNR to formulate the study scope of work. Future partnerships between Federal, State, and local interests will need to address responsibilities of cleanup and the process needed to effectively remove the contaminated sediments. Removal of the contaminated sediments will substantially improve water quality. Improved water quality will lead to restoration of the habitat for fish and wildlife, characterized by healthier benthic communities and improved vegetation for food and refuge. Improved water quality would also lead to reduced taste and odor problems in the water and in fish. Significant economic benefits would come from the municipal and industrial water improvements and the increased recreational opportunities. The Wisconsin Department of Natural Resources has indicated it would be willing to act as the non-Federal sponsor.

The reconnaissance phase was completed in June 2001. If the reconnaissance report is certified to be in accord with policy, FY 2003 funds would be used to initiate the feasibility phase of the study. The estimated cost of the feasibility phase is \$1,500,000, which it to be cost-shared on a 50-50 percent basis between Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (Non-Federal)	750,000

The feasibility study is scheduled for completion in September 2005.

## Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
TOTAL: Special Studies	20,155,000	4,014,000	1,552,000	1,943,000	12,646,000
TOTAL SURVEYS - CONTINUING	91,425,000	50,147,000	4,451,000	6,668,000	30,159,000
TOTAL SURVEYS - NEW & CONT	91,425,000	50,147,000	4,451,000	6,668,000	30,159,000

<sup>3.</sup> PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - NEW: None.

- 4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) CONTINUING:
  - a. Navigation.

Great Lakes and Ohio River Division

Project		Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Waukegan Harbor, IL Chicago District	(1970 Mod.)	575,000	16,000	101,000	200,000	258,000

Waukegan Harbor, Illinois, is on the western shore of Lake Michigan, 16 miles south of Kenosha and 38 miles north of Chicago, Illinois. Waukegan Harbor is the only deep-draft commercial harbor between Milwaukee and Chicago capable of handling large shipments of cement, gypsum, and other building materials. Average annual waterborne commerce at the harbor during the last 10 years was 450,000 tons. Dredging at the Waukegan Inner Harbor area has not occurred since 1969 due to the presence of contaminated sediment and the lack of a confined disposal facility. A feasibility study is underway and the DE Notice is scheduled in December 2002. The feasibility effort consists of evaluating a maintenance dredging plan in combination with harbor deepening and clean-up in two slip areas outside the authorized channel. Existing Federal improvements at Waukegan Harbor consist of dredged navigation channels, piers, and a breakwater. Uncompleted work authorized in 1970 includes deepening the existing entrance channel in the outer harbor from 22 to 25 feet; deepening the channel between piers from 18 to 23 feet; and deepening the inner basin from 18 to 23 feet and extending its limits approximately 275 feet northward. However, additional depths up to 27 feet in the inner harbor and 30 feet in the outer harbor are being evaluated. In order to clean the harbor, approximately 275,000 cubic yards (CY) of contaminated sediment would be dredged from the harbor and possibly placed in a confined disposal facility proposed at an existing settling basin located at an industrial site 2-miles north of the harbor. Another 25,000 CY is targeted for removal from the remaining non-Federal channel areas under the authority of Section 312 of the Water Resources Development Act of 1990. The project cost is estimated to be \$23,000,000 of which up to 46 percent would be a non-Federal sponsor cost. The average annual navigation cost saving benefits amount to \$2,500,000 and the benefit-cost ratio is 2 to 1 based upon a November 1999 economic analysis. The Waukegan Port District, which signed the Feasibility Cost Sharing Agreement in August 1998, is the local sponsor for Preconstruction Engineering and Design (PED). PED will ultimately be cost shared in accordance with the Water Resources Development Act of 1996 at a minimum non-Federal share of 35 percent but will be financed through the PED period at a non-Federal share of 25 percent. Adjustments necessary to bring the non-Federal contribution in line with construction cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction			
Engineering and Design	\$767,000	Engineering and Design	\$767,000		
Initial Federal Share	575,000	Ultimate Federal Share	499,000		
Initial Non-Federal Share	192,000	Ultimate Non-Federal Share	268,000		

The project was authorized for construction by House Resolution dated December 17, 1970, and Senate Resolution dated December 8, 1970. In accordance with the cost sharing requirements, the non-Federal sponsor must provide lands, easements, and rights of way and utility relocations currently estimated at \$4,381,000. FY 2003 funds will be used to continue PED. PED is scheduled for completion in September 2006.

### Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
John T. Myers Locks and Dam, IN and KY Louisville District	8,000,000	2,374,000	1,323,000	1,346,000	2,957,000

John T. Myers Locks and Dam are located on the Ohio River 846.0 miles below Pittsburgh, Pennsylvania, near Uniontown, Indiana. The present navigation locks are on the Indiana side of the river near Mt. Vernon, Indiana, and consist of a 110' X 1,200' main lock and one auxiliary lock of 110' X 600' placed in operation in 1975. A proposed modernization of the existing facility would extend the auxiliary (110' X 600' lock) to become the second 110' X 1,200' lock. Tonnages through Myers locks are expected to grow annually from the 2000 figure of 72.7 million tons to 154.0 million tons in 2060. These tonnage projections indicate that Myers locks is one of the most heavily used locks on the Ohio River system. The need for a lock extension is in response to identified annual increases in tonnage levels and delays. About 44 percent of the present traffic is coal. The Chief of Engineers' interim report for the John T. Myers locks improvements was signed in December, 2000. The estimated project cost is \$225,000,000, with net average annual incremental benefits of \$8,600,000 attributable to navigation. The benefit-to-cost ratio is 1.8 to 1 based on an interest rate of 6-5/8 percent. The project was authorized for construction in WRDA 2000. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the costs of construction would be paid from the Inland Waterways Trust Fund.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	8,000,000	Engineering and Design Costs	8,000,000
Initial Federal Share	8,000,000	Ultimate Federal Share	8,000,000
Initial Non-Federal Share	0	Ultimate Non-Federal Share	0

FY 2002 funds are being used to continue Preconstruction Engineering and Design for foundation explorations and hydraulic studies. FY 2003 funds will be used to continue foundation exploration analysis, hydraulic model studies and engineering analyses, and preparation of the project Design Documentation Reports. The Preconstruction Engineering and Design is scheduled for completion in September 2005.

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Greenup Locks and Dam, KY and OH Huntington District	5,700,000	1,557,000	1,494,000	1,302,000	1,347,000

Greenup Locks and Dam project is located on the left descending bank of the Ohio River near Greenup, Kentucky, 341.0 miles downstream of Pittsburgh, Pennsylvania. The existing project consists of a non-navigable, high-lift gated dam with a top length of 1,287 ft. and two parallel lock chambers. The lock chambers came into service in 1959; the main lock chamber is 110' X 1200' and the auxiliary lock is 110' X 600'. Current projections indicate that by the year 2010, tonnage at the Greenup project will exceed 90 million tons. The 2010 traffic level will exceed the effective capacity of the main lock, so that the auxiliary lock will be regularly required to process traffic. At this point, closure of the main lock, for maintenance or in the event of an accident, will generate massive delays and associated increased costs to industry. Additional lock capacity is required or delay will increase as these locks age. Industry costs associated with these closures will grow. This project enjoys the support of regional and national waterway interests, especially towing companies. The feasibility report was completed in April 2000, and the Division Commanders public notice was signed on May 24, 2000. The NED plan is an extension of the existing 600' auxiliary lock. The recommended project cost is \$240,742,000 (October 2000 price level fully funded), which includes the major rehabilitation of the main lock, with average annual benefits of \$26,500,000. The benefit to cost ratio is 2.5 to 1 based on an interest rate of 6-5/8 percent. In accordance with the cost sharing and financing concepts in the Water Resources Development Act of 1986, 50 percent of the construction cost would be derived from the Inland Waterways Trust Fund.

	Total Estimated Preconstruction	
5,700,000	Engineering and Design Costs	5,700,000
5,700,000	Ultimate Federal Share	5,700,000
0	Ultimate Non-Federal Share	0
	' '	5,700,000 Engineering and Design Costs 5,700,000 Ultimate Federal Share

The project is authorized for construction by the Water Resources Development Act 2000. FY 2002 funds will be used to continue Preconstruction Engineering and Design (PED) consisting mainly of preparation of plans and specs for the mooring facility, geotechnical investigations, the design report for the lock extension, mitigation model studies, and archaeological, historical, cultural, and biological work. FY 2003 funds will be used to continue PED, which is scheduled for completion in September 2004.

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Chickamauga Lock, TN Nashville District	6,400,000	0	315,000	252,000	5,833,000

Chickamauga Lock is located 7 miles northeast of Chattanooga at Mile 471 on the Tennessee River. The existing lock is 60 feet by 360 feet, has a lift of 53 feet, and was placed in operation in 1940, making it the oldest main lock on the Tennessee River. The Corps through an agreement with Tennessee Valley Authority (TVA) is responsible for operations and routine maintenance. TVA identified an alkali aggregate reaction (concrete growth) problem in the 1960's and began measures to shore up the lock. Movement in the lower portion of the lock is constrained because it is founded in 15 feet of bedrock. Because the upper portion is free to expand, the lock is 4 inches longer from gate-to-gate than when lock became operational. The Corps began an aggressive maintenance program in 1999 after executing an Memorandum of Agreement (MOA) with TVA. TVA and the Corps have determined the lock could remain open until 2010. Maintenance costs since 1999 have been \$10,500,000 with future operations and maintenance costs for 2003 through 2010 estimated to be \$12,000,000. The structural integrity of Chickamauga Lock will continue to deteriorate and may become a public safety threat. The available options are to close the lock, thus abandoning 318 miles of waterway to commercial navigation to the Upper Tennessee River area potentially costing over 1,000 jobs, or build a replacement lock. Lock closure would compromise access to the Department of Energy, Oak Ridge facility. The Feasibility Study was initiated for TVA under the support for others program. The estimated study cost is \$2,000,000 comprised of \$1,500,000 of TVA funds and \$500,000 of Corps funds (FY 01 Supplemental Appropriations bill). The Water Resources Development Act of 2000 directed the Corps to use \$200,000 transferred from TVA to prepare a Chief's Report for a replacement lock. The current lock will process only one modern barge at a time. The National Economic Development (NED) plan recommends construction of a replacement lock 75 feet by 400 feet, with an estimate

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	6,400,000	Engineering and Design Costs	6,400,000
Initial Federal Share	6,400,000	Ultimate Federal Share	6,400,000
Initial Non-Federal Share	0	Ultimate Non-Federal Share	0

The project is not authorized for construction. In accordance with cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the costs of construction would be derived from the Inland Waterways Trust Fund. FY 2002 funds are being utilized to complete the feasibility study and initiate Preconstruction Engineering and Design (PED). The feasibility phase will be completed with the issuance of the Division Commander's notice in March 2002. FY 2003 funds will be used to continue Preconstruction Engineering and Design. PED is scheduled for completion in March 2006.

TOTAL: Navigation 20,675,000 3,947,000 3,233,000 3,100,000 10,395,000

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
b. Flood Control.					
Island Creek at Logan, WV Huntington District	3,550,000	2,234,000	619,000	697,000	0

The Island Creek Project is located at Logan in Logan County, West Virginia, at the confluence of the Guyandotte River and Island Creek, and terminates 400 feet upstream of the confluence of Island Creek and Copperas Mine Fork, a total length of 4500 feet. The maximum flood of record was in March 1963, with sustained flooding to a depth of 15 feet. Other major flood events were in January 1957, January 1974, April 1977, May 1984, and March 1996. An occurrence of a 100-year frequency flood would cause an estimated \$19 M in damages. The Corps completed a study in 1993 that recommended a project to reduce significant flooding along Island Creek. However, in FY 94 the local sponsor (Logan County Commission) requested that the project be deferred. The fully funded cost to design and construct the project is estimated at \$23,400,000 (October 2000 price level), with a Federal Cost of \$14,600,000 and a non-Federal cost of \$8,800,000. The project consists of widening 0.7 mile of channel to an 80-foot trapezoidal width, including related excavation, construction of two retaining walls, structure demolition, aquatic and terrestrial mitigation features, permanent channel access for maintenance purposes, spoil site, and flood warning system. Average annual benefits are estimated at \$3,800,000, all for flood control (October 2000 price level), with a benefit-cost ratio of 2.3 to 1 which is based on an interest rate of 6 3/8 percent. In FY 1998 the sponsor received a commitment of financial support from the state of West Virginia and has indicated a willingness to act as non-Federal cost sharing sponsor for this project. PED will ultimately be cost shared at the rate for the project to be constructed (75/25) but will be financed through the PED phase at 100% Federal financing. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished during the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$3,550,000	Engineering and Design Costs	\$3,550,000
Initial Federal Share	3,550,000	Ultimate Federal Share	2,662,500
Initial Non-Federal Share	0	Ultimate Non-Federal Share	887,500

The project is authorized for construction by Section 401 of the 1986 Water Resources Development Act (P.L. 96-662). FY 2002 funds are being used to continue PED activities. FY 2003 funds will be used for the completion of PED in September 2003.

TOTAL: Flood Control 3,550,000 2,234,000 619,000 697,000 0

Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
c. Watershed/Ecosystem.					
Ashtabula River Environmental Dredging, OH	900,000	249,000	276,000	160,000	215,000

The Ashtabula River is located along the southern shore of Lake Erie, approximately 150 west of Buffalo, New York, and 55 miles east of Cleveland, Ohio. The upper portion of the navigation channel (upstream of the 5th Street bridge) has been limited to dredging of the upper 4 to 6 feet of sediments based on the existence of sediments unsuitable for open lake disposal; the last upstream dredging occurred in 1993. Contamination appears to be moving downstream of the bridge. Sediments suitable for open lake disposal are located in an area halfway between the bridge and river mouth and the outer harbor. The primary contaminants of concern are PCB's, PAH's, heavy metals and low-level radionuclides. In recent years, due to contamination from an area Superfund Site and continued shoaling of the Federal channel, there have been a number of investigations and projects (related to both the Federal infrastructure and Superfund concerns). In 1994, an Ashtabula River Partnership (ARP) was formed in order to address the impaired beneficial uses within the river and harbor area, primarily caused by contaminated sediments. The purpose of the project is to remove and remediate a total of 696,000 cubic yards of contaminated sediments so that full beneficial use of the river/harbor can be realized. Dredging up to the 5th Street bridge will involve O&M, General, and Section 312(a) of WRDA 1990 authorities (total of 115,000 cubic yards of sediment). Whereas from the 5th Street bridge upstream to just above the turning basin, Section 312(b) of WRDA 1990 authorities will be used for the removal of contaminated sediments for purposes of environmental enhancement and water quality improvement (total of 581,000 cubic yards of sediment). The project will address the dredging of contaminated sediments, and construction of facilities for sediment transfer/dewatering/disposal and water fullular treatment. The final feasibility report, known as the Comprehensive Management Plan, and Environmental Impact Statement was released for general pub

Total Estimated Preconstruction	Total Estimated Preconstruction		
Engineering and Design Costs	\$1,200,000	Engineering and Design Costs	\$1,200,000
Initial Federal Share	900,000	Ultimate Federal Share	780,000
Initial non-Federal Share	300,000	Ultimate non-Federal Share	420,000

The project is authorized for construction by the Water Resources Development Act of 1990, Section 312, as amended by Section 205 of WRDA 1996, and cost shared in accordance with the provisions of the Water Resources Development Act of 1999, Section 224, at 65 percent Federal and 35 percent non-Federal. FY 2002 funds are being used to continue PED consisting of detailed designs for sediment dredging technologies; dewatering, transfer, and landfill disposal; and water treatment facilities. FY 2003 funds will be used to continue PED and complete detailed designs, prepare/complete plans and specifications, and the draft PCA. PED is scheduled for completion in September 2004.

## Great Lakes and Ohio River Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
TOTAL: Watershed/Ecosystem	900,000	249,000	276,000	160,000	215,000
TOTAL PED - CONTINUING	25,125,000	6,430,000	4,128,000	3,957,000	10,610,000
TOTAL PED - NEW & CONTINUING	25,125,000	6,430,000	4,128,000	3,957,000	10,610,000
GRAND TOTALS - SURVEYS & PED	116,550,000	56,577,000	8,579,000	10,625,000	40,769,000

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Olmsted Locks and Dam, Illinois and Kentucky (Continuing)

LOCATION: The project is located in Pulaski County, Illinois, and Ballard County, Kentucky, on the Ohio River near Olmsted, Illinois, approximately 964 miles downstream from Pittsburgh, Pennsylvania.

DESCRIPTION: The project will replace Ohio River Locks and Dams 52 and 53. The new structure will consist of two 110' by 1200' locks adjacent to the Illinois shore and a dam comprised of tainter gates, navigable pass, and a fixed weir. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1988.

REMAINING BENEFIT-REMAINING COST RATIO: 10.1 at 8 7/8 percent.

TOTAL BENEFIT-COST RATIO: 3.5 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 3.7 at 8 7/8 percent (FY 1991).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the Olmsted Locks and Dam Benefit Update, dated October, 1990.

	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
ntire Project	50	Sep 2011
PH	HYSICAL DATA	
ock - 110 by 1,200 foo	t Chambers	2
am - Navigable Pass		1,400 ft.
xed Weir		561 ft.
ainter Gates		744 ft.
cres – Dam		123 acres
oad		21 acres
sposal Area		114 acres
ow Easements		35 acres
nt oc ai cr	Jan 2002) tire Project  Plock - 110 by 1,200 foot m - Navigable Pass ed Weir nter Gates res – Dam ad posal Area	Jan 2002) COMPLETE tire Project 50  PHYSICAL DATA ck - 110 by 1,200 foot Chambers m - Navigable Pass ed Weir nter Gates res – Dam ad posal Area

Division: Great Lakes & Ohio River District: Louisville Olmsted Locks and Dam, IL & KY

4 February 2002 29

SUMMARIZED FINANCIAL DATA (Continued)	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2001	\$ 257,229,000	\$ 257,229,000	
Conference Allowance for FY 2002	20,000,000	20,000,000	
Allocation for FY 2002	17,128,000 <u>1</u> /	17,128,000 <u>1</u> /	
Allocations through FY 2002	274,357,000	274,357,000	52
Allocation Requested for FY 2003	38,500,000	38,500,000	59
Programmed Balance to Complete after FY 2003	217,143,000	217,143,000	
Unprogrammed Balance to Complete after FY 2003	\$ 0	\$ 0	

<sup>1/</sup> Reflects a reduction of \$3,197,000 assigned as savings and slippage and \$325,000 reprogrammed to the project.

JUSTIFICATION: The project is in a strategic location on the inland waterway system. Virtually all waterway traffic moving between the Ohio River and tributaries and the Mississippi River and tributaries passes through the project area. Olmsted Locks and Dam will replace existing Ohio River Locks and Dams 52 and 53, which are over 70 years old. Both projects have temporary lock chambers that are inefficient and neither project conforms to current design criteria for structural stability. Commercial navigation in 1999 was 95 million tons through Lock 52 and 88 million tons through Lock 53. Historically, tonnage growth has been steady and is expected to continue in the long term. The long term (2010-2030) average annual growth rate is projected to be 0.8 percent. The value of the commodities through the project area in 1999 was estimated at \$20 billion. Energy-related commodities comprised approximately 38 percent of the total tonnage, with grains and chemicals each contributing approximately 11 and 10 percent, respectively, of total tonnage. The projected increases in waterway traffic demands in combination with the limited capacity of the existing locks will result in increased lockage delays, costing the industry over \$526 million on an annual basis.

The following counties qualify as areas of "substantial and persistent" unemployment: Illinois - Alexander, Johnson, Massac, Pope, Pulaski, and Union; Kentucky - Ballard, Carlisle, Graves, Livingston, and Marshall.

JUSTIFICATION (continued):

Average annual benefits are as follows:

Annual Benefits	Amount

Navigation	\$ 526,253,300
Employment	837,000
Cost Reduction	27,333,400

Total \$ 554,423,700

FISCAL YEAR 2003: The requested amount of \$77,000,000 for this project will be applied as follows:

\$ 33,000,000
70,000
13,700,000
614,000
16,925,000
3,500,000
2,050,000
1,900,000
5,121,000
120,000
\$ 77,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50% of the total cost of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

Division: Great Lakes & Ohio River District: Louisville Olmsted Locks and Dam, IL & KY

4 February 2002

31

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$1,060,000,000 is a increase of \$8,000,000 from the latest estimate (\$1,052,000,000) presented to Congress (FY 2002). The change includes the following items.

Item	Amount
Price Escalation on Construction Features	\$ 8,000,000
Total	\$ 8,000,000

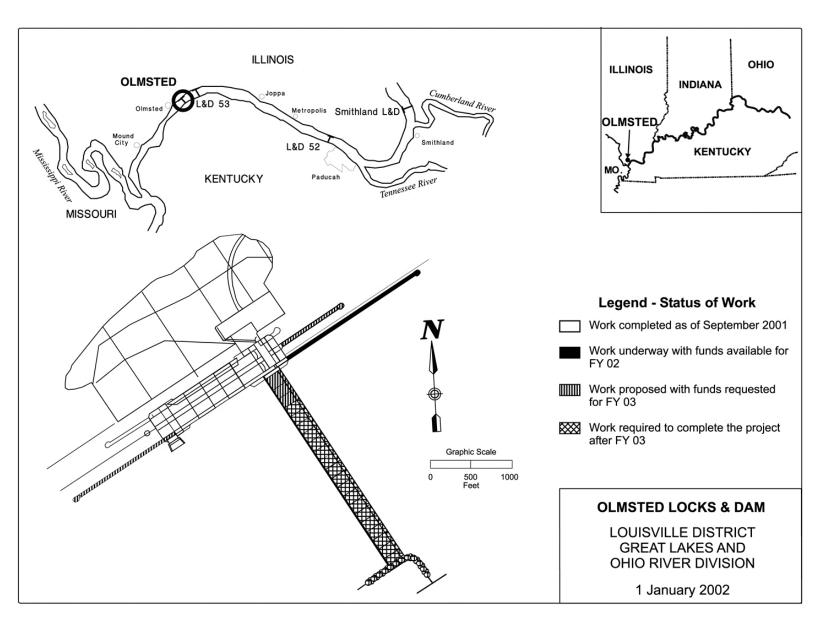
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency on April 4, 1986. Due to project changes, a Draft Supplemental EIS was filed in November 1991. The Final Supplement to the EIS was filed on March 26, 1993, and the Record Of Decision was signed on May 5, 1993.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986. Funds to initiate construction were appropriated in FY 1991.

The scheduled completion date of September 2011 is the same as last presented to Congress (FY2002).

Division: Great Lakes & Ohio River District: Louisville Olmsted Locks and Dam, IL & KY

4 February 2002 32



APROPRIATION TITLE: Construction, General – Channel and Harbor (Navigation)

PROJECT: Indiana Harbor and Canal, Confined Disposal Facility, Indiana (Continuing)

LOCATION: The project is located on the southwestern shore of Lake Michigan within the City of East Chicago, Lake County, Indiana, 4-1/2 miles east of the Indiana-Illinois state line and 17 miles from downtown Chicago, Illinois.

DESCRIPTION: Indiana Harbor and Canal (IHC) is an authorized Federal navigation project with an entrance channel and outer harbor protected by breakwaters, and an inner harbor which includes the Indiana Harbor Canal and its two branches, the Lake George Branch, which extends west for a distance of 6,800 feet, and the Calumet River Branch which extends south for about 2 miles where it joins the Grand Calumet River. A 4.8 million cubic yards capacity Confined Disposal Facility (CDF) will be constructed on the 164 acres of land adjacent to the Lake George Branch of the IHC, formerly occupied by an oil refinery owned by the Atlantic Richfield Company and subsequently acquired by Energy Cooperative Incorporated (ECI). The ECI property, which currently has open Resource Conservation and Recovery Act (RCRA) status, was transferred to the current local sponsor, the East Chicago Waterway Management District (ECWMD) in 1994. Use of this site for the CDF is contingent upon the construction of specific RCRA closure and corrective action features which will be integral aspects of the CDF construction. The elements of the CDF include construction of dikes; a hydraulic gradient control system which includes monitoring and extraction wells and a subsurface cutoff wall; an on-site effluent treatment plant; a rehandling area and air monitoring.

AUTHORIZATION: River and Harbor Acts of 1910 and 1960.

REMAINING BENEFIT - REMAINING COST RATIO: 2.1 to 1 at 7 3/8 percent.

TOTAL BENEFIT-COST RATIO: 2.1 to 1 at 7 3/8 percent.

INITIAL BENEFIT-COST RATIO: 2.1 to 1 at 7 3/8 percent (FY 1999)

BASIS OF BENEFIT COST RATIO: Benefits are from the Final Comprehensive Management Plan, Indiana Harbor and Canal Maintenance Dredging and Disposal Activities, dated January 1999 at October 1997 price levels.

Division: Great Lakes & Ohio River District: Chicago Indiana Harbor and Canal, Confined Disposal Facility, IN

SUMMARIZED FINANCIAL DATA				ACC PCT. C FED. (	F EST	STATUS:	(1 JAN 2002)	PERCE COMPL		PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement		\$	78,000,000			Entire Pro	oject	0		Sep 2006
Future Non-Federal Reimbursement		\$	10,000,000				PH	IYSICAL DA	TA	
Estimated Federal Cost (Ultimate)  Estimated Non-Federal Cost Cash Contributions Other Costs Reimbursements	54,400,000 1,600,000 10,000,000		68,000,000 66,000,000				Dikes RCRA Cap Rehandling Ar Effluent Treatr Cutoff Wall		13,000 948,000 1 1 341,715	cu. yds.
Total Estimated Programmed Project Cost Total Estimated Unprogrammed Project Co	st	\$ 1	34,000,000 0							
Total Estimated Project Cost		\$ 1	34,000,000							
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002		\$	4,918,000 5,000,000 4,201,000 9,119,000	<u>1</u> /	13					
Allocation Requested for FY 2003 Programmed Balance to Complete After FY Unprogrammed Balance to Complete after			6,800,000 52,081,000 0		23					

<sup>1/</sup> Reflects \$799,000 reduction assigned as savings and slippage.

JUSTIFICATION: Indiana Harbor received over 15 million tons of waterborne commerce in 1990, second only to the Port of Chicago in tonnage received on Lake Michigan. The LTV Steel Company, Ispat Inland Steel Company, U.S. Gypsum Company, Safety-Kleen Company and the Amoco Oil Company are the primary users of the Indiana Harbor and Canal. Ispat Inland Steel Company, one of the largest steel manufacturers in the United States, is the largest user of the harbor.

Division: Great Lakes & Ohio River District: Chicago Indiana Harbor and Canal, Confined Disposal Facility, IN

## JUSTIFICATION (continued):

There is an estimated 1 million cubic yards backlog of maintenance dredging at the Indiana Harbor and Canal. The resulting inadequate channel depths are causing deep-draft vessels to plow through sediments at various locations, pushing them into berthing areas and other areas located along dock faces outside of the Federal channel. In addition, ships come into the harbor loaded at less than optimum vessel drafts. There is also a problem due to restricted use of various docks and double handling of bulk commodities as a result of inadequate channel depths. These problems are currently causing increased transportation costs of waterborne commerce at this navigation project, estimated at \$12.4 million annually. These additional costs are estimated to increase to \$17.3 million by the year 2031. Ships trading into Indiana Harbor forfeit as much as 16 inches of draft, or more than 4,300 tons of cargo each arrival.

The Indiana Harbor and Canal navigation project and the Grand Calumet River region have been identified as one of the 43 Great Lakes Areas of Concern by the International Joint Commission primarily due to the quality of the watercourse sediments. Polluted sediments are continually put into suspension due to propeller action of commercial ships. Major storm events flush polluted sediments from the harbor into Lake Michigan. It is estimated that between 100,000 and 200,000 cubic yards of polluted sediment are being discharged from the harbor into the lake annually. The annual sediment load to the lake contains an estimated 67,000 pounds of chromium, 100,000 pounds of lead and 420 pounds of PCB's. Adverse impacts can be detected and measured for a distance of more than 5 miles from the harbor entrance, affecting water supply intakes, sport fishing and recreational areas. Dredging will remove approximately 4.8 million cubic yards of contaminated sediments from the ambient environment in Northwest Indiana and will partially mitigate the currently unrestricted migration of these polluted materials into the near shore areas of Lake Michigan.

The Indiana Harbor and Canal navigation project has not been dredged since 1972. The United States Environmental Protection Agency determined that disposal in Lake Michigan was no longer acceptable due to the polluted character of the dredged material, nor are they suitable for unconfined upland disposal or beneficial use. Therefore, a confined disposal facility must be constructed before maintenance dredging of the Federal channel can commence.

The total average annual benefits are \$14,333,000.

FISCAL YEAR 2003: The requested amount of \$6,800,000 will be applied as follows:

Continue Cutoff Wall Construction	\$4,400,000
Engineering & Design	2,100,000
Construction Management	300,000

Total \$6,800,000

Division: Great Lakes & Ohio River District: Chicago Indiana Harbor and Canal, Confined Disposal Facility, IN

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Pay 25 percent of the costs allocated to general navigation facilities during construction.	\$ 26,000,000	
Reimburse an additional 10 percent of the costs of general navigation facilities allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, and relocations, allocated to general navigation facilities.	\$10,00,000	
Pay 100 percent of the construction costs allocated to the local service facilities (berthing areas) and 100 percent of operations and maintenance costs allocated to the local service facilities.	\$ 28,400,000	\$ 370,000
Provide lands, easements, rights of way, and borrow areas.	\$ 50,000	
Modify or relocate utilities, roads, bridges (except existing bridges over, Navigable waters) and other facilities, where necessary for the construction of the project.	\$ 1,550,000	
Total Non-Federal	\$66,000,000	\$370,000

The non-Federal sponsor has agreed to make all payments required concurrently with construction and to make all required reimbursements within a period of 30 years following completion of construction.

Division: Great Lakes & Ohio River District: Chicago Indiana Harbor and Canal, Confined Disposal Facility, IN

STATUS OF LOCAL COOPERATION: The East Chicago Waterway Management District is the local sponsor. The Project Cooperation Agreement was executed on 7 August 2000.

The non-Federal cost estimate of \$66,000,000 which includes a cash contribution of \$54,400,000, has changed from the non-Federal cost estimate of \$56,900,000 which includes a cash contribution of \$47,300,000, as noted in the PCA. The non-Federal sponsor is financially capable and willing to contribute the non-Federal share.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate (ultimate) of \$68,000,000 is a increase of \$6,900,000 from the last estimate presented to Congress of \$61,100,000 (FY 2002).

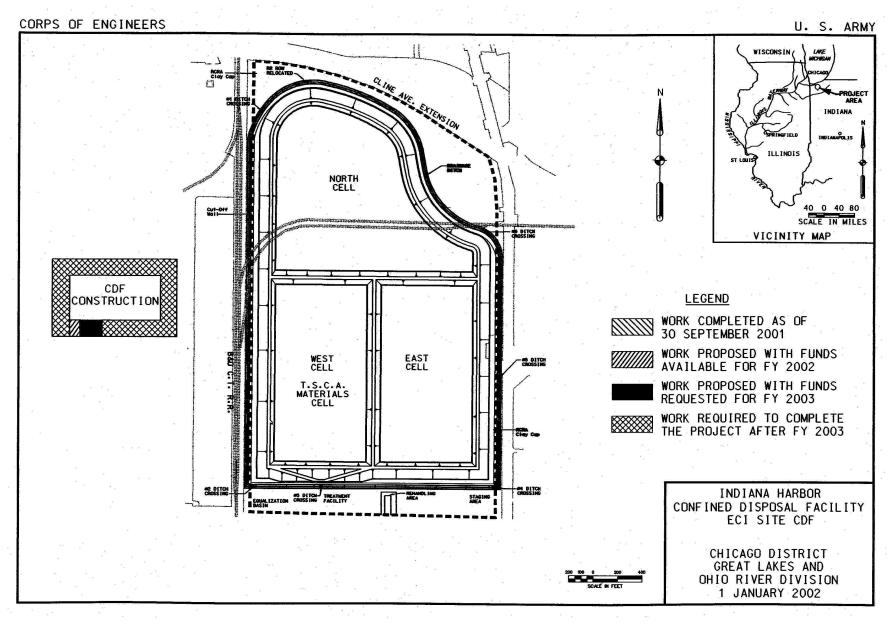
Item	Amount
Post Contract Award and other estimated adjustment	\$6,900,000
Total	\$6,900,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Public and Agency review of final Environmental Impact Statement and the Comprehensive Management Plan were completed in November 1998. The Record of Decision for the FEIS for the entire project was signed February 2, 1999.

OTHER INFORMATION: Initial construction funds were appropriated in FY 1999. The Comprehensive Management Plan, Indiana Harbor and Canal Maintenance Dredging and Disposal Activities, dated January 1999, was completed with Operation and Maintenance funds. The East Chicago Waterway Management District, the local project sponsor, has received letters of intent from the Ispat Inland Steel and LTV Steel companies to participate with the local sponsor as users of the confined disposal facility project.

The scheduled completion date of September 2006 is unchanged from the latest completion date presented to Congress (FY 2002).

Division: Great Lakes & Ohio River District: Chicago Indiana Harbor and Canal, Confined Disposal Facility, IN



4 February 2002

39

APPROPRIATION TITLE: Construction General - Locks & Dams (Navigation)

PROJECT: Kentucky Lock and Dam, Tennessee River, Kentucky

LOCATION: The project is located on the Tennessee River at Mile 22.4 near Grand Rivers, Kentucky.

DESCRIPTION: The modernization of the existing facility will include the addition of a 110-foot x 1200-foot lock landward and adjacent to the existing 110-foot x 600-foot lock, and the relocation of an existing railroad, highway, and powerhouse access road. The railroad and highway will be relocated downstream of the new lock's lower gates and will require the construction of new bridges across the river. The powerhouse access road will be relocated from the east bank to the west bank and will require the construction of a new ramp. All work is programmed,

AUTHORIZATION: The Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 2.4 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 2.4 at 7 5/8 percent.

INITIAL BENEFIT-COST RATIO: 2.4 at 7 5/8 percent (FY 1998).

BASIS OF BENEFIT COST RATIO: Limited Reevaluation Report approved in November 1995 and costs are based on the Innovated Design/Cost Reduction Studies completed in June 1995.

SUMMARIZED FINANCIAL DATA	<b>4</b>	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION
	\$533,000,000 500,000 500,000	Entire Project	13	SCHEDULE Sep 2010
Total Estimated Project Cost	\$533,000,000	PHY	SICAL DATA	
	Lock Bridge	Chamber (New) es		110 ft. x 1,200 ft.
	Ç	Railroad (New) Highway (New)		3,100 ft. 3,100 ft.

Division: Great Lakes & Ohio River District: Nashville Kentucky Lock and Dam, Tennessee River, KY

## SUMMARIZED FINANCIAL DATA (Continued)

	CONSTRUCTION GENERAL	INLAND WATERWAYS TRUST FUND	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002	34,529,000 11,000,000 9,242,000 <u>1</u> / 43,771,000	34,529,000 11,000,000 9,242,000 <u>1</u> / 43,771,000	16
Allocation Requested for FY 2003 Programmed Balance to Complete after FY 2003 Unprogrammed Balance to Complete after FY 2003	13,700,000 209,029,000 0	13,700,000 209,029,000 0	25

<sup>1/</sup> Reflects \$1,758,000 reduction assigned as savings and slippage.

JUSTIFICATION: The existing 110-foot x 600-foot Kentucky Lock is too small to handle a modern 15-barge tow without two lockages. This greatly increases the processing time resulting in Kentucky Lock having one of the highest transit times on the inland waterway system. Delays at the lock averaged over 4 hours per tow in 2001. System traffic is expected to grow annually from the 38 million tons recorded in 2000 to an estimated 77 million tons in 2050 resulting in a 38.4 hour average delay per tow. The addition of a new 1200-foot lock will greatly reduce these delays and generate \$55.1 million in average annual benefits to the nation as a result of reduced cost to transport commodities through the system.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Construction Planning, Engineering, and Design Construction Management	\$17,650,000 8,402,000 1,348,000
Total	\$27,400,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost for the project will be derived from the Inland Waterways Trust Fund.

Division: Great Lakes & Ohio River District: Nashville Kentucky Lock and Dam, Tennessee River, KY

4 February 2002

41

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$533,000,000 is unchanged from the last estimate presented to Congress (FY 2002).

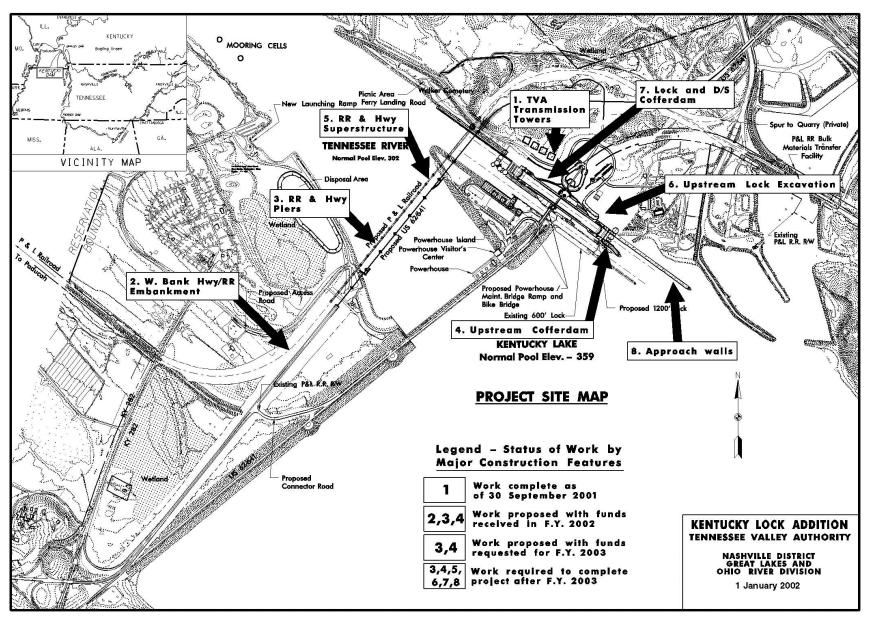
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Impact Statement was included in the Final Feasibility Report and the Record of Decision was signed on 26 March 1998. A supplemental Environmental Impact Statement to address relocation feature changes and design refinements identified subsequent to the original report and Environmental Impact Statement was completed in 2001 and the Record of Decision was signed on 20 July 2001.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1993.

Funds to initiate construction were appropriated in FY 1998.

The scheduled completion date of September 2010 has not changed from the date last presented to Congress (FY 2002).

Division: Great Lakes & Ohio River District: Nashville Kentucky Lock and Dam, Tennessee River, KY



4 February 2002

43

PROJECT: McAlpine Locks and Dams, Kentucky and Indiana (Continuing)

LOCATION: The project is located on the Ohio River at Louisville, Jefferson County, Kentucky, Ohio River mile 604.0 to 608.0.

DESCRIPTION: The modernization of the existing facility will replace a 600-foot auxiliary lock chamber and an inactive 360-foot 2-stage chamber with a 1,200-foot lock on the Kentucky bank side of the existing lock and dam. This effort will result in twin 1,200-foot locks for tow traffic. Construction of a new bridge is required to continue access to Shippingport Island and the Louisville Gas & Electric hydroelectric power facility.

AUTHORIZATION: The Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 2.1 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 8 percent.

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the General Design Memorandum, Project Economic Update approved in March 1994, at 1994 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost General Appropriations	139,000,000	\$ 278,000,000	Entire Project	23	Sep 2008
Inland Waterways Trust Fund	139,000,000			PHYSICAL DA	ATA
Estimated Non-Federal Cost		0	Wharf Extension	• • •	35,400 sf
			Boat Mooring F	-acility	6,100 sf
Total Estimated Project Cost		\$ 278,000,000	Fixed Bridge		2,100 ft
			Lock Chamber	(New)	110 by 1,200 ft
			Buildings:		·
			Resident E	Engineer	6,100 sf
			Operations	s Service	2,300 sf

Division: Great Lakes & Ohio River District: Louisville McAlpine Locks and Dams, KY and IN

Storage 5,100 sf

SUMMARIZED FINANCIAL DATA (Continued)	GENERAL APPNS	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2001 Conference Allowance for FY 2002	\$ 30,158,000 9,316,000	\$ 30,158,000 9,316,000	
Allocation for FY 2002	8,027,000 <u>1</u> /	8,027,000 <u>1</u> /	
Allocations through FY 2002	38,185,000	38,185,000	27
Allocation Requested for FY 2003 Programmed Balance to Complete after FY 2003	3,096,000 97,719,000	3,096,000 97,719,000	30
Unprogrammed Balance to Complete after FY 2003	\$ 0	\$ 0	

<sup>1/</sup> Reflects \$1,489,000 reduction assigned as savings and slippage and \$200,000 reprogrammed to the project.

JUSTIFICATION: The existing navigation locks are on the Kentucky side of the river. They consist of a 110 by 1,200 foot main lock that was placed in operation in 1961 and two auxiliary locks that were completed in 1930 (110 by 600 foot) and 1921 (56 by 360 foot, closed since 1971). The modernization of the existing facility would replace the existing auxiliary locks with a new 110 by 1,200 foot lock. The new lock is in response to identified annual increases in tonnage levels and delays. Tonnages through the McAlpine Locks are expected to grow annually from the 1993 figure of 63.2 million tons to 127 million tons in 2060. About 40 percent of current traffic is coal. Currently, the average delay is 0.8 hours per tow. With the existing project, by the year 2060, the average delay is projected to be 40 hours per tow. With the lock addition, the average delay is projected to be 1.5 hours per tow. Other project components include a fixed bridge spanning 2,100 feet, including 840 feet of embankment, and three one-story buildings for offices, service, and storage.

Average annual benefits are as follows:

Annual Benefits	Amount
Navigation from Reduced Delays	\$ 41,621,800
Total	\$ 41.621.800

FISCAL YEAR 2003: The requested amount will be applied as follows:

Complete Cofferdam Construction	\$ 4,546,000
Planning, Engineering, and Design	342,000
Construction Management	1,264,000
Real Estate Administration	40,000

Total \$ 6,192,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

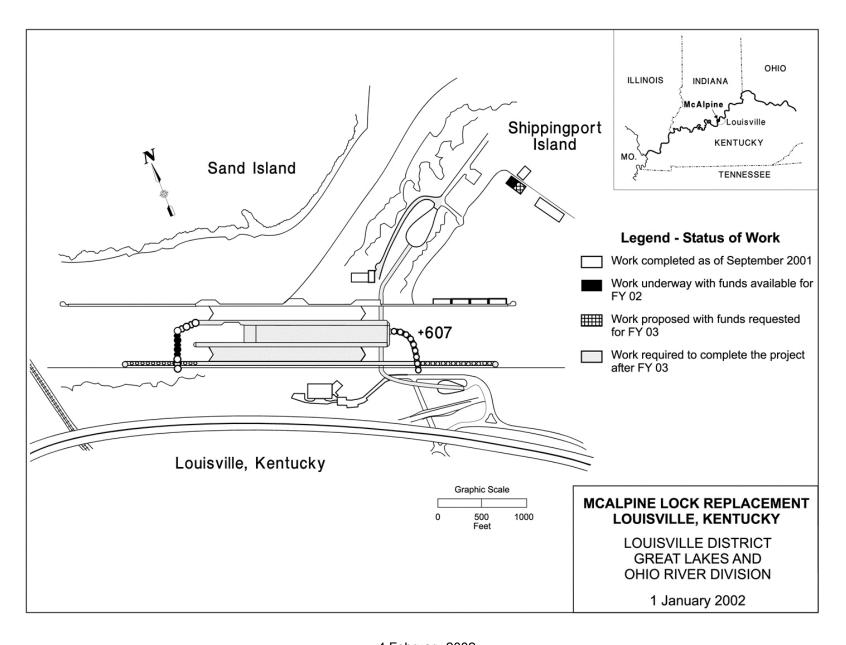
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$278,000,000 is the same as last presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) and a Finding of No Significant Impacts (FONSI) have been signed and included in the Final Feasibility Report. In addition, a Section 404 (b) (1) Evaluation has been completed and 401 Water Quality Certification has been obtained from the Kentucky Division of Water. The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency in August, 1990. A supplemental EIS updating project requirements was completed in FY 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1990. Funds to initiate construction were appropriated in FY 1996.

The scheduled completion date of September 2008 is the same as the latest completion date presented to Congress (FY 2002).

Division: Great Lakes & Ohio River District: Louisville McAlpine Locks and Dams, KY and IN



APPROPRIATION TITLE: Construction General - Locks and Dams (Navigation)

PROJECT: Locks and Dams 2, 3 and 4, Monongahela River, Pennsylvania (Continuing)

LOCATION: Existing Locks and Dams 2, 3, and 4 are the last of the old and undersized locks on the Monongahela River system and have components which have been in service for nearly 100 years. The three projects are located on the lower portion of the Monongahela River near the city of Pittsburgh, Pennsylvania and are located in Allegheny, Washington and Westmoreland Counties. Measured from the Point in Pittsburgh, Locks and Dam 2 is located at river mile 11.2, Locks and Dam 3 at river mile 23.8, and Locks and Dam 4 at river mile 41.5. Six other navigation projects situated upstream of Locks and Dam 4 provide a navigable waterway to Fairmont, West Virginia. At the Point in Pittsburgh, the Monongahela River joins with the Allegheny River to form the Ohio River.

DESCRIPTION: Existing Locks and Dam 2 consists of a main lock with chamber dimensions of 110 by 720 feet, an auxiliary lock with chamber dimensions of 56 by 360 feet, and a 748-foot fixed-crest dam. Existing Locks and Dam 3 consists of locks with chamber dimensions of 56 by 720 feet and 56 by 360 feet and a 670-foot fixed-crest dam. Existing Locks and Dam 4 consists of locks with chamber dimensions of 56 by 720 feet and 56 by 360 feet and a gated dam consisting of five 84-foot gated sections and a 43-foot fixed weir section. The authorized projects consist of a new gated dam and a rehabilitated auxiliary chamber floodway bulkhead structure at Locks and Dam 2; new twin 84 by 720 foot locks and below-dam scour protection of Locks and Dam 4; raising pool 2 by 5 feet and lowering pool 3 by 3.2 feet; removal of Locks and Dam 3; and associated channel dredging, relocations and bank stabilization. Construction began in FY 1995 with the upgrade of the Locks 2 auxiliary chamber floodway bulkhead and relocations. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1992.

REMAINING BENEFIT - REMAINING COST RATIO: 4.9 to 1 at 8 3/4 percent.

TOTAL BENEFIT - COST RATIO: 2.5 to 1 at 8 3/4 percent.

INITIAL BENEFIT-COST RATIO: 3.9 to 1 at 8 3/4 percent (FY 1995).

BASIS OF BENEFIT - COST RATIO: The initial Benefit-Cost ratio from Feasibility Report dated December 1991.

Division: Great Lakes & Ohio River District: Pittsburgh Locks and Dams 2,3, and 4, Monongahela river, PA

SUMMARIZED FINANCIAL DATA				STATUS (1 Jan 2002	PERCENT ) COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost General Appropriations Inland Waterway Trust Fund	\$ 375,000,000 \$ 375,000,000	\$ 750,000,000		Entire Proje	ct 29	Sep 2010
Estimated Non-Federal Cost		0				
Total Estimated Project Cost		\$ 750,000,000				
			GENERAL APPNS.	INLAND WATERWA TRUST FUN	YS PC	CUM. T.OF EST. D.COST
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocation thru FY 2002			\$ 88,586,000 \$ 20,235,000 \$ 20,501,000 <u>1</u> / \$ 109,087,000	\$ 88,586,000 \$ 20,235,000 \$ 20,501,000 \$ 109,087,000	) ) <u>1</u> /	29
Allocation Requested for FY 2003			\$ 18,009,000	\$ 18,008,000	)	34
Programmed Balance to Complete a Unprogrammed Balance to Comple			\$ 247,904,000 0	\$ 247,905,000 0		

 $<sup>\</sup>underline{1}$ / Reflects a reduction of \$3,234,000 for savings and slippage and \$3,500,000 reprogrammed to the project.

#### PHYSICAL DATA

Locks and Dams 2 and 3:

New gated dam 2
Rehabilitated Auxiliary Chamber Floodway L&D 2
Bulkhead Structure L&D 2
Remove Locks and Dam 3
Raise pool 2 by 5 feet and lower pool 3 by 3.2 feet

Locks and Dam 4:

New twin 84 by 720 foot locks
Scour Protection

JUSTIFICATION: The projects are located on the Monongahela River near Pittsburgh. The major problems with the projects are deteriorated structural condition and limited lock capacity. These problems are expected to become increasingly severe as the projects age. The extreme structural deterioration of Dam 2 and Locks and Dam 3 is of paramount concern. Major repairs and rehabilitation will not prevent structural failure. The probability of major structural failure and catastrophic loss of navigation pools is unacceptable. The completion of the new gated Braddock Dam, now under construction at Locks and Dam 2, together with completion of the Pool 2 relocations and raising of Pool 2, will provide significant risk mitigation while the balance of the authorized plan is under design and construction. The continued viability of the Lower Monongahela River navigation system is vital to southwestern Pennsylvania and northeastern West Virginia. For example, CONSOL Energy's Alicia Dock, located along the Monongahela River near Brownsville, PA., is a new transshipment facility with the capacity to throughput 6 million tons of coal annually. Coal is transferred from rail cars directly onto river barges, or can be stored on site up to 200,000 tons capacity. This facility will benefit from the improved reliability and efficiency to be provided by the projects. Average annual benefits are as follows:

Annual Benefits	Amount
Commercial Navigation (Shallow Draft Locks) Replacement of Shore side Utilities	\$ 298,000,000 2,000,000
Total	\$300,000,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Real Estate Acquisition	\$ 1,728,000
Continue Leetsdale Archaeology	2,895,000
Continue Municipal Relocations	2,333,000
Continue Planning, Engineering and Design	7,587,000
Continue Construction	19,274,000
Continue Construction Management	2,200,000
Total	\$ 36,017,000

NON-FEDERAL COSTS: In accordance with the cost-sharing and financing concepts reflected in the Water Resource Development Act of 1986, 50% of the total cost of construction will be derived from the Inland Waterways Trust Fund.

Construction of the projects will require modification to privately owned shore side facilities and submarine utility crossings, which were all constructed under Department of the Army permits pursuant to Section 10 of the Rivers and Harbors Act, approved March 3, 1899. The estimated cost to owners of adapting these facilities to new project conditions is \$111,000,000.

STATUS OF LOCAL COOPERATION: None required.

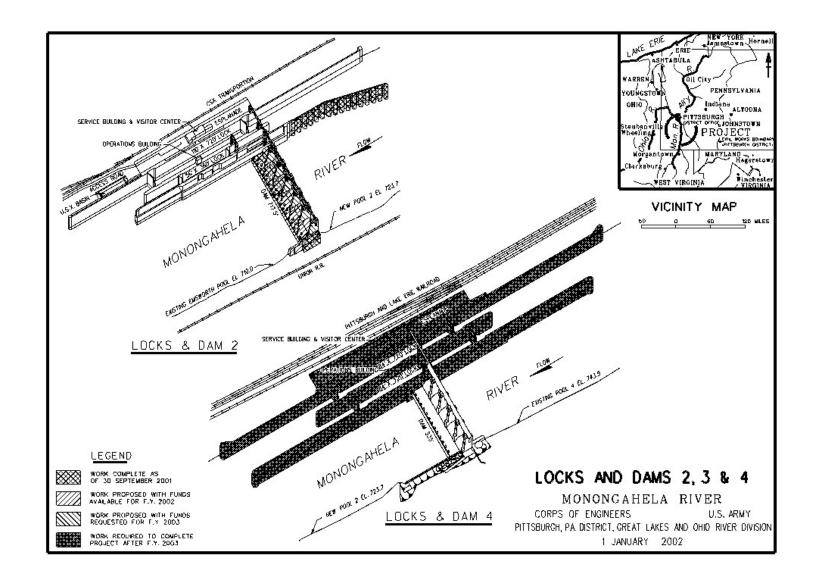
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$750,000,000 is an increase of \$45,000,000 over the last estimate presented to Congress (FY 2002). The change includes the following items:

ITEM		AMOUNT
Price level updating and inflation		\$17,200,000
Design changes Post contract award and other estimating adjustment	ts	16,800,000 6,300,000
Price escalation on real estate		4,700,000
	Total	\$45,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on January 28, 1992. The Record of Decision was signed by the Director of Civil Works on December 17, 1992. A Supplemental Environmental Impact Statement on Project Disposal and various other Environmental Assessments, all resulting in Finding of No Significant Impacts have been completed pursuant to NEPA.

Division: Great Lakes & Ohio River District: Pittsburgh Locks and Dams 2,3, and 4, Monongahela river, PA

OTHER INFORMATION: Funds to initiate preconstruction engineering in FY 1995.	ng and design were appropriated in FY 19	992. Funds to initiate construction were appropriated
The scheduled completion date has changed from September 2009, t	the latest completion date presented to C	Congress (FY 2001), to September 2010.
Division: Great Lakes & Ohio River	District: Pittsburgh	Locks and Dams 2,3, and 4, Monongahela river, PA
	4 February 2002	52



4 February 2002

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Marmet Locks and Dam, West Virginia (Continuing)

LOCATION: Marmet Locks and Dam is located in Kanawha County near Belle, West Virginia, on the Kanawha River approximately 68 miles above its confluence with the Ohio River. The pool is located entirely in West Virginia.

DESCRIPTION: The proposed modernization plan includes the construction of an additional 110 foot by 800 foot lock on the right descending bank landward of the existing locks. The plan includes the continued use of both existing 56 foot by 360 foot lock chambers as auxiliary locks. The existing dam and the hydroelectric power plant will also remain in operation. A total of 216 additional real estate tracts will be required to support the project. Of the 216 tracts, 179 are residential, 9 are commercial and 28 are vacant. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 4.6 to 1 at 7 5/8 percent interest rate.

TOTAL BENEFIT-COST RATIO: 2.9 to 1 at 7 5/8 percent interest rate.

INITIAL BENEFIT-COST RATIO: 3.3 to 1 at 7 5/8 percent interest rate (FY 1998).

BASIS OF BENEFIT-COST RATIO: Economic Update dated June 1996 and at October 1995 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$313,000,000	Entire Project	17	Sep 2010
Construction General Inland Waterways Trust Fund	156,500,000 156,500,000				
Total Estimated Project Cost		\$313,000,000			

Division: Great Lakes & Ohio River District: Huntington Marmet Locks and Dam, WV

# SUMMARIZED FINANCIAL DATA (Continued)

		INLAND	ACCUM.
	GENERAL	WATERWAYS	PCT. OF EST.
	APPNS.	TRUST FUNDS	FED. COST
Allocations to 30 September 2001	\$ 23,379,000	\$ 23,379,000	
Conference Allowance for FY 2002	13,550,000	13,550,000	
Allocation for FY 2002	9,194,000 1/	9,194,000 1/	
Allocations through FY 2002	32,573,000	32,573,000	21
Allocation Requested for FY 2003	5,489,000	5,489,000	24
Programmed Balance to Complete after FY 2003	118,438,000	118,438,000	
Unprogrammed Balance to Complete after FY 2003	0	0	

<sup>1/</sup> Reflects \$2,166,000 reduction assigned as savings and slippage, and \$2,190,000 reprogrammed from the project.

## PHYSICAL DATA

Lock: Lands and Damages:

Number – 3 Acres – 21, Existing Locks and Dam

Existing Chambers - 2 - 56 ft. x 360 ft. - 103, New Lock

Additional Chamber - 1 - 110 ft. x 800 ft.

Lift - 24 ft.

Structures - 242 Residences

24 ft. Structures - 242 Residences - 10 Businesses

Division: Great Lakes & Ohio River District: Huntington Marmet Locks and Dam, WV

JUSTIFICATION: Marmet Locks and Dam links the Kanawha Valley, an important chemical and coal producing area, to its product markets and supply areas. During 2001, 16.4 million tons of traffic locked through Marmet. Coal is the major commodity shipped on the Kanawha River, accounting for over 94 percent of the total tonnage. The Marmet project presents a significant impediment to the efficient flow of waterborne commerce due to its outdated features. To compound the effect on flow efficiency, Marmet traffic demand is projected to increase to 35.5 million tons by 2050. It is also projected that the traffic demand will increase to about 20.4 million tons, exceeding the current maximum lock capacity of 20 million tons without switch boats, by the year 2005. Amendments to the Clean Air Act, passed in November 1990, have caused an increase in demand for the Kanawha River Basin's low-sulphur coal. When the new Winfield Lock came on line in November 1997, the industry's helper boats relocated from Winfield to Marmet. Lockages at Marmet immediately increased 30% to 50% in magnitude. The congestion is expected to increase as traffic on the river increases.

Average Annual Benefits	Amount
Commercial Navigation	\$ 55,943,000
Total	\$ 55,943,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Total

Complete Land Acquisition	\$ 500,000
Continue Relocations	200,000
Continue Lock Construction	8,690,000
Engineering and Design	838,000
Supervision and Administration	750,000

NON-FEDERAL COST: In accordance with the cost sharing and financing contained in the Water Resources Development Act of 1986, 50 percent of the total costs of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$313,000,000 is unchanged from the latest estimate (\$313,000,000) presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with the Environmental Protection Agency (EPA) on January 26, 1994.

Division: Great Lakes & Ohio River District: Huntington Marmet Locks and Dam, WV

4 February 2002 56

\$10,978,000

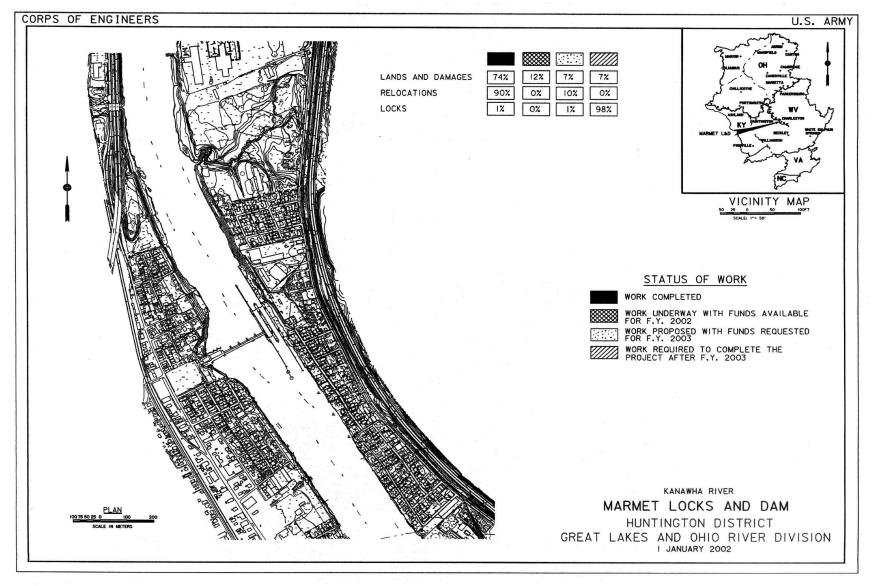
OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1994. Funds to initiate construction were appropriated in FY 1998.

Environmental Site Assessments (Phase I and II) identified soil contamination at levels sufficient to warrant remedial activity. None of the contamination identified is considered hazardous; rather, it is a non-hazardous contaminant which requires that the soil be disposed of in a landfill in conformance with Subtitle D of the Resource Conservation and Recovery Act (RCRA). No groundwater contamination was found.

The District has developed plans for the new lock construction to have minimum interference with river traffic during construction, but some interference is expected. The District had established dialogue with the towing industry to determine the best methods to use to minimize interference.

The scheduled completion date of September 2010 is a slippage from the latest completion date of September 2009 presented to Congress (FY2002). This change is due to constrained funding levels.

Division: Great Lakes & Ohio River District: Huntington Marmet Locks and Dam, WV



APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Robert C. Byrd Locks and Dam (formerly Gallipolis Locks and Dam), West Virginia and Ohio (Continuing)

LOCATION: The project is situated in the Middle Ohio Valley at Ohio River mile 279.2, approximately 14 miles downstream from the mouth of the Kanawha River in West Virginia and approximately 30 miles upstream from the City of Huntington, West Virginia. The new locks are in Mason County, West Virginia and the abutment of the dam is in Gallia County, Ohio.

DESCRIPTION: The project includes the rehabilitation of the non-navigable, high-lift, gated, existing dam and construction of a new 1200 by 110 foot main lock and a new 600 by 110 foot auxiliary lock in a canal extending across a slight bend in the river, bypassing the existing locks and dam on the left descending (West Virginia) bank. The canal, in effect, straightens the river bend and provides a relatively straight down-bound approach for several miles. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1935, Supplemental Appropriations Act, 1985, and the Water Resources Development Act of 1986. The Water Resources Development Act of 1992, Section 118, changed the project name to the Robert C. Byrd Locks and Dam. The Water Resources Development Act of 2000, Section 548, added authorization to preserve and restore the General Jenkins House at Lesage/Greenbottom Swamp.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because construction of the project is substantially complete.

TOTAL BENEFIT-COST RATIO: Not applicable because construction of the project is substantially complete.

INITIAL BENEFIT-COST RATIO: 11.3 to 1 at 8 1/8 percent (FY 1985).

BASIS OF BENEFIT-COST RATIO: General Design Memorandum, dated November, 1982, at October, 1982 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
New Construction Work Estimated Federal Cost General Appropriations Inland Waterways Trust Fund	155,200,000 155,200,000	\$ 310,400,000	Entire Project Lock Construction Mitigation Sites Dam Rehabilitation	97 100 90 98	Sep 2004 Jan 1993 Sep 2004 Sep 2004

Division: Great Lakes & Ohio River District: Huntington Robert C. Byrd Locks and Dam, WV and OH

# SUMMARIZED FINANCIAL DATA (Continued)

Dam Rehabilitation Estimated Federal Cost General Appropriations Inland Waterways Trust Fund Total Estimated Federal Cost General Appropriations Inland Waterways Trust Fund	35,300,000 35,300,000 190,500,000 190,500,000	\$ 70,600,000 \$ 381,000,000		
Estimated Non-Federal Cost		0		
Total Estimated Project Cost		\$ 381,000,000		
		GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002		\$186,008,000 <u>1</u> / 1,500,000 1,260,000 <u>2</u> / 187,268,000	\$186,008,000 1,500,000 1,260,000 <u>2</u> / 187,268,000	98
Allocation Requested for FY 2003 Programmed Balance to Complete after I Unprogrammed Balance to Complete after		750,000 2,482,000 0	750,000 2,482,000 0	99

<sup>1/</sup> Allocation thru FY 01 includes \$9,526,000 paid by Department of Treasury Judgment Fund for settled claim.

<sup>2/</sup> Reflects \$240,000 reduction assigned as savings and slippage.

## PHYSICAL DATA

Bypass Canal:

Length - 1.7 miles

Bottom Width - 500 feet (min)

Locks:

Number - 2

Main Lock - 110 x 1,200 feet Auxiliary Lock - 110 x 600 feet

Dam:

Major rehabilitation of the existing navigation dam to include replacing the dam roller gates and strengthening the foundation.

Lands and Damages:

Total existing easement area
Existing locks and dam
New locks and canal
Mitigation
Dam rehabilitation

1798 acres
82 acres
846 acres
837 acres
28 acres

JUSTIFICATION: Completion of the new locks has enabled tows to transit the project area efficiently and has completed a series of 110 by 1200 foot locks from near Pittsburgh to Cairo, Illinois. Reduced delays and transportation costs are benefiting the economy of the Nation directly and indirectly. The project is strategically located between the highly industrialized upper Ohio River Basin area and its product markets and supply regions. Robert C. Byrd Locks and Dam captures a significant portion of the commodities transiting the Ohio River. The traffic levels (number of lockages) have decreased and volume of commodities have increased at Robert C. Byrd Locks and Dam, as forecast in the authorization document. Between the years of 1993 and 2001, traffic has ranged from 51.2 to 58.1M tons annually. Commodity traffic projections reflect 75.8 million tons transiting the project in 2020.

The new locks and the dam rehabilitation also remedy problems associated with the age, condition, and hazardous location of the existing facilities. The existing locks and dam are over 50 years old and have been increasingly difficult to operate and maintain. Lock outages have been a major problem and would have become very critical in the future. Accident reports and information from the navigation industry documented that the existing facilities were unsafe due to the locks and velocities generated during above normal river conditions.

Average annual benefits for the project are estimated as follows:

Annual Benefits	Amount
Commercial Navigation Recreation	\$161,178,000 140,000
Total	\$161.318.000

Division: Great Lakes & Ohio River District: Huntington Robert C. Byrd Locks and Dam, WV and OH

4 February 2002

FISCAL YEAR 2003: The requested amount will be applied as follows:

	New Construction	Major Rehabilitation
Complete Vegetation Plantings	\$ 200,000	
Continue Painting of Bridge over Dam		\$ 1,100,000
Engineering and Design	40,000	60,000
Construction Management	20,000	80,000
Total	\$ 260,000	\$ 1,240,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total costs of construction will be derived from Inland Waterways Trust Fund. The West Virginia Division of Natural Resources will be responsible for operation and management of mitigation lands at an estimated average annual cost of \$55,000 for the Greenbottom area and \$345,000 for the on-site mitigation (fish hatchery). The West Virginia Division of Culture and History annual O&M cost for the General Jenkins House is estimated to be \$30,000.

STATUS OF LOCAL COOPERATION: The West Virginia Division of Natural Resources by lease agreement has assumed responsibility for operation and management of the off-site mitigation area. The General Jenkins House has been subleased to the West Virginia Division of Culture and History. The Corps is in the process of turning the completed onsite mitigation fish hatchery in fee over to the State of West Virginia Division of Natural Resources.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$381,000,000 is an increase of \$2,000,000 from the latest estimate (\$379,000,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount	
Price Escalation on Construction Features Authorized Modifications Post Contract Award and Other Estimating Adjustments	\$ 329,000 1,575,000 96,000	
Total	\$ 2,000,000	

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (EIS) was filed with Environmental Protection Agency on January 8, 1981. Supplement I to the EIS was filed on October 30, 1991.

Division: Great Lakes & Ohio River District: Huntington Robert C. Byrd Locks and Dam, WV and OH

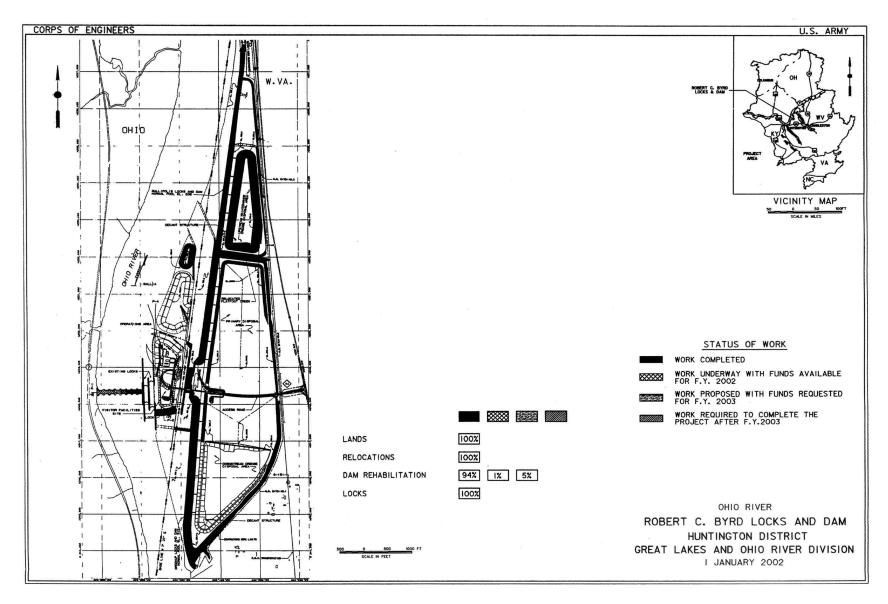
4 February 2002

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1984. Funds to initiate construction were appropriated in FY 1985. The Water Resources Development Act (WRDA) of 1992, Section 118, changed the project name to the Robert C. Byrd Locks and Dam.

The Water Resources Development Act of 2000, Section 548, includes authority to preserve and restore the General Jenkins House, which is located at the Greenbottom Wildlife Management Area. The Corps is working with the West Virginia Division of Culture and History and interested local historical groups to develop a strategy to implement the provisions of WRDA 2000. The scope and total cost of the restoration has not yet been developed.

The scheduled completion date of September 2004 has not changed from the date last presented to Congress (FY2002).

Division: Great Lakes & Ohio River District: Huntington Robert C. Byrd Locks and Dam, WV and OH



APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Winfield Locks and Dam, West Virginia (Continuing)

LOCATION: Winfield Locks and Dam is located in Putnam County, West Virginia, on the Kanawha River near Eleanor, approximately 31 miles above the confluence with the Ohio River. The pool is located entirely in West Virginia.

DESCRIPTION: The modernization plan includes the construction of an additional 110 by 800 foot lock on the right descending bank landward of the existing locks and a 110-foot wide non-navigable gate bay between the old lock and the new lock. The new lock will be skewed six degrees landward (upstream to downstream) from the existing locks. The plan includes the continued use of both existing 56 by 360 foot lock chambers as auxiliary locks. The existing dam also will remain in use. All work is programmed.

AUTHORIZATION: The Supplemental Appropriations Act, 1985 for engineering and design and land acquisition, and the Water Resources Development Act of 1986 for construction.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because the project is substantially complete.

TOTAL BENEFIT-COST RATIO: Not applicable because the project is substantially complete.

INITIAL BENEFIT-COST RATIO: 6.2 to 1 at 8 5/8 percent (FY 1987).

BASIS OF BENEFIT-COST RATIO: Design Memorandum No. 1, General Design Memorandum, dated April, 1988.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost General Appropriations \$117,950,000 Inland Waterways Trust Fund 117,950,000	\$235,900,000	Entire Project Locks Operation	98 nal 100	Sep 2005 Nov 1997
Estimated Non-Federal Cost	0			
Total Estimated Project Cost	\$235,900,000			

Division: Great Lakes & Ohio River District: Huntington Winfield Locks and Dam, WV

SUMMARIZED FINANCIAL DATA (Continued)		INLAND	ACCUM.
·	GENERAL	WATERWAYS	PCT. OF EST.
	APPNS.	TRUST FUND	FED. COST
Allocations to 30 September 2001	\$113,672,000	\$113,672,000	
Conference Allowance for FY 2002	1,350,000	1,350,000	
Allocation for FY 2002	1,134,000 <u>1</u> /	1,134,000 <u>1</u>	
Allocations through FY 2002	114,806,000	114,806,000	97
Allocation Requested for FY 2003	100,000	100,000	97
Programmed Balance to Complete after FY 2003	3,044,000	3,044,000	
Unprogrammed Balance to Complete after FY 2003	0	0	

<sup>1/</sup> Reflects \$216,000 reduction assigned as savings and slippage.

#### PHYSICAL DATA

Lock: Lands and Damages:

Number - 1 Acres - 1,243 easement

Chamber - 110 by 800 ft. - 41 for existing Locks and Dam

Lift - 28 ft. - 316 for new Lock

New Lock Site:

Mobile home park (37 units), two active industries, and one inactive industry.

JUSTIFICATION: Winfield Locks and Dam links the Kanawha Valley, an important chemical and coal producing area, to its product markets and supply areas. Up-bound traffic through Winfield is composed of important supplies of chemicals, feedstocks, aggregates, and petroleum fuels. Down-bound traffic is composed largely of coal produced in the upper Kanawha River Basin and destined for electric generating facilities and coking plants throughout the middle and upper Ohio River Basin. Since 1990, Winfield locks has averaged over 21.4 million tons of traffic a year. During 2001, 20.3 million tons of traffic locked through Winfield. Coal accounts for approximately 80 percent of the total tonnage.

The Winfield project presented a significant impediment to the efficient flow of waterborne commerce due to its outdated features. Before the new chamber came on-line in November 1997, only 30 percent of the barges processed at Winfield were the size that the project originally was designed to

Division: Great Lakes & Ohio River District: Huntington Winfield Locks and Dam, WV

## JUSTIFICATION: (Continued)

serve and only two percent of the tows were small enough to be locked in a single operation. The average delay per tow was 4.0 hours in 1996 with an average of over 4 lockages per tow. The total processing time (lockage plus delay time) was 6.7 hours, the highest in the Ohio River system. Furthermore, Winfield traffic demand is projected to more than triple over the next 70 years, from 13 million tons in 1980 to 39.2 million tons by 2050, an annual growth rate of 1.6 percent. Navigation safety has not been a major problem at Winfield Locks, but the potential for navigation accidents was present. The problem stemmed from the orientation of the locks and the design of the lock walls. The 56' X 360' locks are located on the inside of a bend in the river that requires tows to make several maneuvers to enter and exit the locks. This is especially difficult during high river flows. With 800 foot long tows becoming more common, the short upper guard wall also presents a problem. The upper guard wall is only 450 feet long, which means that about half of a tow extends beyond the end of the wall as lockage progresses. This presents a danger that the tow might break up and be swept down on the dam during high-flow conditions. As the number of large tows increases at Winfield, the probability of accidents occurring in such instances also increases.

Average annual benefits for the project total \$56,109,000, all for commercial navigation.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Planning, Engineering and Design for Mitigation \$ 200,000

Total \$ 200,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total costs of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: Upon completion of the project, a Memorandum of Agreement will be prepared between West Virginia Division of Natural Resources (WVDNR) and the Corps of Engineers for WVDNR to assume responsibility for operation and management of the mitigation area. Annual costs are estimated to be \$30,000.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$235,900,000 is an increase of \$400,000 from the latest estimate (\$235,500,000) presented to Congress (FY 2002). This change includes the following items:

Price Escalation on Construction Features \$ 400,000

Total \$ 400,000

Division: Great Lakes & Ohio River District: Huntington Winfield Locks and Dam, WV

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency on September 25, 1987. The Ohio River Division Commander signed a Supplemental Environmental Impact Statement (SEIS) on April 28, 1993. The SEIS was prepared because of the need to realign the new lock as a result of hydraulic model testing.

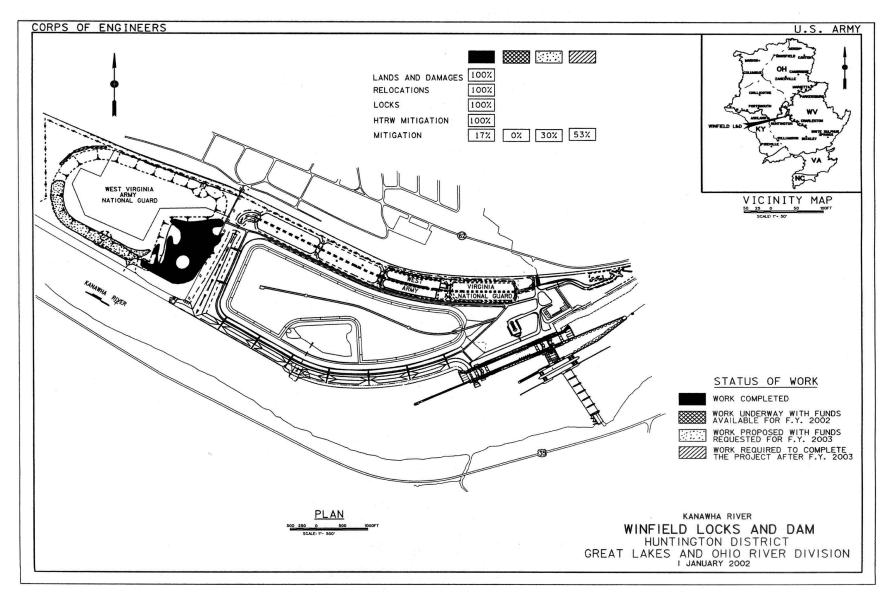
OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1985 and funds to initiate construction were appropriated in FY 1987.

Hazardous and toxic substances found on the site were removed by former landowner, ACF Industries. Temporary buildings constructed for storage of hazardous materials will be transferred to the National Guard Bureau for controlled storage of equipment. A License Agreement between the Corps and National Guard has been signed allowing the Guard to use the facility until the transfer papers are finalized. The West Virginia National Guard is constructing a complex that would include a combined support maintenance shop, organizational maintenance shop, and armory facility on thirty acres of the downstream disposal area. A License Agreement has been signed for this as well. The thirty acres will be included in the final transfer document. Because this construction would affect the mitigation agreement between the Corps and resource agencies, a memorandum of agreement was executed between the National Guard, the resource agencies, and the Corps for off-site mitigation to replace mitigation acreage lost due to transfer to the Guard.

Design and construction of systems mitigation is the remaining project feature. Negotiations are ongoing with US Fish and Wildlife and the West Virginia Division of Natural Resources for the proper treatment to be applied.

The scheduled completion date of September 2005 is a slippage from the latest completion date of September 2004 presented to Congress. This change is due to constrained funding levels.

Division: Great Lakes & Ohio River District: Huntington Winfield Locks and Dam, WV



APPROPRIATION TITLE: Construction, General – Shoreline Protection

PROJECT: Chicago Shoreline, Illinois (Continuing)

LOCATION: The project is located in northeast Illinois on the southern shore of Lake Michigan within the City of Chicago in Cook County.

DESCRIPTION: The project consists of constructing shoreline protection structures along 9.2 miles of the shoreline in the Lincoln Park and Burnham Park areas. Other project features include: revetments near the Adler Planetarium and at Meigs Field; a breakwater to protect the South Water Purification Plant near 78th Street; and beach nourishment of two short reaches of shoreline near Fullerton Avenue and at 31st Street.

AUTHORIZATION: Water Resources Development Act of 1996, and Water Resources Development Act of 1999.

REMAINING BENEFIT - REMAINING COST RATIO: 2.9 to 1 at 7 3/4 percent.

TOTAL BENEFIT-COST RATIO: 3.7 to 1 at 7 3/4 percent.

INITIAL BENEFIT-COST RATIO: 5.5 to 1 at 7 3/4 percent (1997).

BASIS OF BENEFIT COST RATIO: Benefits are from the latest available evaluation approved in March 1998, at October 1997 price levels.

SUMMARIZED FINANCIAL I	DATA		FED. COST	STATUS: (1 JAN 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			\$174,000,000	Entire Project	39	Sep 2005
Estimated Non-Federal Cost Cash Contributions	\$ 126,000,0	000	\$126,000,000	PHYS	SICAL DATA	
Other Costs	\$	0		Step Stone Revetment Breakwater Reconstruction	44,208 feet on 2,670 feet	
Total Estimated Project Cost			\$300,000,000	Beach Replenishment	2,000 feet	

Division: Great Lakes & Ohio River District: Chicago Chicago Shoreline, IL

ACCUM
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FED COST
3,460,000
5,000,000
0,704,000 <u>1</u> /
, 836,000 51
9,000,000 62
5,836,000
0

<sup>1/</sup> Reflects \$3,996,000 reduction assigned as savings and slippage and \$300,000 reprogrammed from the project.

JUSTIFICATION: The project area includes 11 miles of the 28 miles of publicly owned shoreline within the City of Chicago. The adjacent land mass and transportation network are protected by continuous revetments and seawalls, most of which were built in the early 1900's. Those constructed of wood pilings and stone cribs have begun to fail. As the land behind the structures is lost due to storms, the high capacity road network which runs parallel to the shoreline will be impacted. These roads carry an estimated 120,000 vehicles per day. Re-routing this traffic will cause serious disruption and significant traffic delay damages. In addition, facilities located on public property, with a capital investment of several billion dollars, will be destroyed. Over the past several years, significant degradation of the existing shore structures has occurred. Large sections of revetment have collapsed as a result of medium duration and intensity storm events. The rate of degradation is increasing, and short-term changes in sections are easily recognizable. The purification plant breakwater had collapsed to the point where gaps in the structure were visible. The breakwater protects the South Water Purification Plant, which services 2.5 million persons.

Average annual benefits are as follows:

Annual Benefits	Amount
Storm Damage Prevention Recreation	\$45,127,000 26,082,000
Total	\$71,209,000

Division: Great Lakes & Ohio River District: Chicago Chicago Shoreline, IL

# FISCAL YEAR 2003: The requested amount of \$19,000,000 will be applied as follows:

Complete Construction in Reach 2 (Montrose North)	\$2,000,000
Complete Construction in Reach 4 (41 <sup>st</sup> to 43 <sup>rd</sup> St)	1,000,000
Continue Construction in Reach 2 (Diversey to Fullerton)	3,000,000
Continue Construction in Reach 4 (37 <sup>th</sup> to 40th St)	5,020,000
Continue Construction in Reach 4 (40th to 41st St)	3,000,000
Continue Construction in Reach 2 (Belmont to Diversey)	3,000,000
Engineering & Design	880,000
Construction Management	1,100,000
Tabal	<b>#</b> 40,000,000

Total \$19,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Pay 35 percent of the costs allocated to hurricane and storm damage reduction for the Federally supportable plan as reduced for credit allowed for non-Federal work under Section 215 of the Flood Control Act of 1968 and/or Section 206 of the Water Resources Development Act of 1992, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hurricane and storm damage reduction facilities	\$ 94,100,000	\$ 463,000
Pay all the incremental costs of the locally preferred plan over the Federally supportable plan as reduced for credit allowed for non-Federal work under Section 215 of the Flood Control Act of 1968 and/or Section 206 of the Water Resources Development Act of 1992.	\$ 31,900,000	
Total Non-Federal Costs	\$126,000,000	\$ 463,000

Division: Great Lakes & Ohio River District: Chicago Chicago Shoreline, IL

## NON-FEDERAL COST: (continued)

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The City of Chicago and the Chicago Park District are the local sponsors for the project. The reimbursement agreement for protection of the filtration plant (Reach 5) was executed on April 28, 1997. A Project Cooperation Agreement encompassing 31<sup>st</sup> Street to 33<sup>rd</sup> Street, 1,000 feet of protection at Belmont Avenue, and beach stabilization at 31<sup>st</sup> Street was executed in August 1998. The Project Cooperation Agreement for the remainder of the project was executed on May 17, 1999. The Chicago Park District currently owns all lands required for the project. The non-Federal cost estimate of \$126,000,000, which is exclusively the cash contribution, has not changed from the non-Federal cost estimate of \$126,000,000 which is the cash contribution as noted in the PCA. The non-Federal sponsor is financially capable and willing to contribute the non-Federal share.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$174,000,000 is a decrease of \$188,000 from the latest estimate (\$174,188,000) presented to Congress (FY 2002). The Administration is considering proposed changes to the cost share for shore protection projects.

Item	Amount
Price escalation on Construction Features	\$ -188,000
Total	\$ -188,000

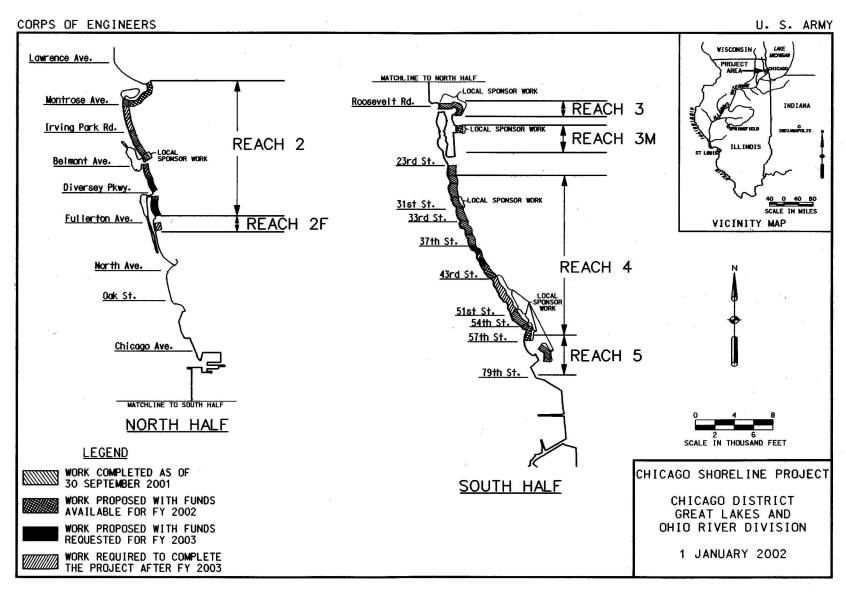
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: One Environmental Assessment (EA) for entire project was signed on July 3, 1993, and another EA, for additional land at Reach 4, 51<sup>st</sup> to 54<sup>th</sup> Street was signed on June 25, 1999.

OTHER INFORMATION: Funds to initiate PED were appropriated in FY 1992. Funds to initiate construction were appropriated in FY 1997. The project authorization provides for reimbursement for the Federal share of construction work performed by the non-Federal sponsor in Reach 5. WRDA 1999 authorized credit for work that was performed at Reach 3, Solidarity Drive, prior to execution of the Project Cooperation Agreement.

The Federally supportable plan includes rubblemound revetments in Lincoln Park and Burnham Park. The locally preferred plan substitutes steel sheet pile, and concrete step-stone revetments for the rubblemound revetments. The non-Federal sponsor will pay the incremental costs of the locally preferred plan.

The scheduled completion date of September 2005 is unchanged from the latest completion date presented to Congress (FY 2002).

Division: Great Lakes & Ohio River District: Chicago Chicago Shoreline, IL



APPROPRIATION TITLE: Construction General-Shoreline Protection

PROJECT: Presque Isle Peninsula, Pennsylvania (Permanent) (Continuing)

LOCATION: Presque Isle Peninsula is located in the city of Erie, Erie County, Pennsylvania, on the south shore of Lake Erie 78 miles southwest of Buffalo, New York and about 102 miles northeast of Cleveland, Ohio.

DESCRIPTION: The initial construction at Presque Isle State Park consisted of a system of 55 rubblemound breakwaters located offshore along the lakeward length of Presque Isle Peninsula and placement of approximately 560,000 tons of beach sand fill. Each breakwater is 150 feet long with a 350 foot gap between structures. The initial construction was completed in November 1992, but in order to maintain the beaches, a periodic nourishment program for 50 years following the initial project construction is required. All work is prgrammed.

AUTHORIZATION: Water Resources Development Act of 1986 (Public Law 99-662)

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction has been completed.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 8-7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8-7/8 percent (FY 1988)

BASIS OF BENEFIT-COST RATIO: Phase II General Design Memorandum approved 27 July 1988 (January 1986 price levels).

Division: Great Lakes & Ohio River District: Buffalo Presque Isle Peninsula, PA

SUMMARIZED FINANCIAL DATA	<b>A</b> :			STATUS: (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		00 505 000	\$ 66,585,000			
Programmed Construction Initial Construction	13,435,000	66,585,000		Initial Construction	100	Nov 1992
Periodic Nourishment	53,150,000			Periodic nourishment	11	Jun 2042
Estimated Non-Federal Cost			\$ 66,585,000			
Programmed Construction Initial Construction	66,585,000		<b>+</b> ,,			
Cash Contribution	13,435,000					
Other Costs (Lands) Periodic Nourishment	0					
Cash Contribution	53,150,000					
Other Costs	0					
Total Estimated Project Cost			\$133,170,000			
Initial Construction	26,870,000		¥ , ,			
Periodic Nourishment	106,300,000					
			Accum Pct. of Est	PHYSICAL	DATA	
			Fed. Cost	Initial Construction:		
Allocations to 30 September 2001		18,747,000		55 Rubblemound C	Offshore Breakwater	rs.
Conference Allowance for FY 200	2	728,000		560,000 Tons of Be		
Allocations for FY 2002		612,000 1	/ 29	Removal of some e	existing shore prote	ction structures.
Allocations through FY 2002		19,359,000	29	Periodic nourishment:		
Allocation Requested for FY 2003		580,000	30	55,000 Tons of Bea	ach Nourishment (A	nnually)
Programmed Balance to Complet	46,646,000					
Unprogrammed Balance to Comp	lete after FY 2003	0				

<sup>1/</sup> Reflects \$116,000 reduction assigned as savings and slippage.

Division: Great Lakes & Ohio River District: Buffalo Presque Isle Peninsula, PA

JUSTIFICATION: That portion of the project referred to herein as the Initial Construction as detailed in the Phase II General Design Memorandum, which was approved on 27 July 1988 and being a system of segmented breakwaters, was completed in November 1992.

The annual benefits identified in that Design Memorandum updated to current price levels are as follows:

Annual Benefits	Amount
Decreased Maintenance Cost	\$ 167,000
Structural Damage Prevented	7,000
Land Loss Prevention	21,000
Decreased Dredging Costs	401,900
Decreased Nourishment Cost	2,658,600
Total	\$ 3,255,500

FISCAL YEAR 2003: The requested amount of \$580,000 will be applied as follows:

Nourishment Contract	\$ 467,000
Planning, Engineering and Design	78,000
Construction Management	35,000
Total	\$ 580,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation:	Payments During Construction and Reimbursements	Maintenance, Repair, Rehabilitation and Replacement Costs
Pay one-half of the separable costs allocated to recreation, including periodic nourishment, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of breakwater features.	\$ 66,585,000	\$ 95,976
Total Non-Federal	\$ 66,585,000	\$ 95,976

The non-Federal sponsor has agreed to make all required payments concurrently with project construction and 50% of its share of periodic nourishment costs through the life of the project.

Division: Great Lakes & Ohio River District: Buffalo Presque Isle Peninsula, PA

STATUS OF LOCAL COOPERATION: The Local Cooperation Agreement was executed by the Assistant Secretary of the Army on 22 June 1989. In a letter dated 3 October 1988, the non-Federal sponsor indicated that it is financially capable and willing to contribute the 50% non-Federal share of the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$66,585,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate presented to Congress (FY 2002) includes the following items.

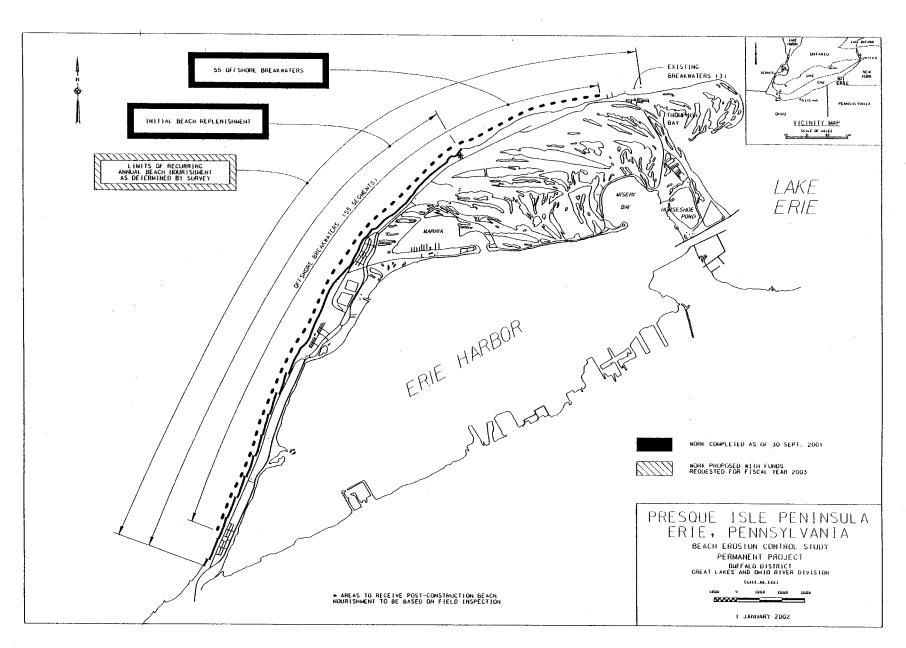
Item	Amount
Change in Assumed Cost Share	\$ 17,205,000
Total	\$17,205,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with USEPA on 13 March 1981. The provisions of Section 404 of the Clean Water Act were met by the Public Notice issued on 9 October 1979, a Section 404(b)(1) Evaluation dated 21 December 1979, and a Section 401 Water Quality Certificate issued by the Commonwealth of Pennsylvania dated 8 August 1988. The Record of Decision which completed the NEPA process was signed by the Director of Civil Works on 2 November 1988.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1989.

The scheduled completion date of June 2042 has not changed from the latest completion date presented to Congress (FY 2002).

Division: Great Lakes & Ohio River District: Buffalo Presque Isle Peninsula, PA



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: McCook and Thornton Reservoirs, Illinois (Continuing)

LOCATION: The project area covers 341 square miles of the combined sewer area in Cook County in Chicago and 48 adjacent suburban communities.

DESCRIPTION: The authorized project consists of constructing two reservoirs from stone quarries located in McCook and Thornton, Cook County, Illinois having floodwater storage capacities of 21,400 acre-feet (7 billion gallons) and 14,600 acre-feet (4.8 billion gallons), respectively. The Thornton Reservoir project authorization was modified to evaluate inclusion of the National Resource Conservation Service Thorn Creek Reservoir with the Thornton Reservoir project. A Limited Reevaluation Report, currently under preparation will evaluate the construction of a composite reservoir. This could increase the capacity to 24,200 acre-feet (7.8 billion gallons). The two reservoirs will serve as the termini of the Metropolitan Water Reclamation District of Greater Chicago's TARP project (Tunnel and Reservoir Plan) Phase I tunnels. TARP was developed by Federal, State, regional and local government as a regional plan for reducing flood damages and improving water quality in area waterways. The two reservoirs will capture and store combined sewer flows from the tunnel systems for later treatment after the storm event. Currently, when the tunnels reach their capacity, the combined flow of raw sewage and storm water backs up through the sewer system into basements of homes & businesses and roadways and is discharged directly into area waterways. When storm events are severe, the locks must be opened to release the combined sewer flow into Lake Michigan - the source of drinking water for millions. Reservoir features include pumps, a cutoff wall, main & distribution tunnels/gates/valves, hydraulic structures, wall stabilization, aquifer protection and aeration & washdown systems.

AUTHORIZATION: Water Resources Development Act of 1988, modified by the Water Resources Development Act of 1999.

REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 8 1/2 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 8 1/2 percent.

INITIAL BENEFIT-COST RATIO: 2.0 to 1 at 8 1/2 percent (FY 1994).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation in the Final Special Reevaluation Report dated February 1999 at October 1997 price levels.

Division: Great Lakes & Ohio River District: Chicago McCook and Thornton Reservoirs, IL

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	;	\$ 513,000,000	McCook Reservoir	0	Sep 2013
Estimated Non-Federal Cost		171,000,000	Thornton Reservoir	0	Sep 2014
Cash Contributions	131,670,000		Entire Project	0	Sep 2014
Other Costs	39,330,000				
Total Estimated Project Cost	;	\$ 684,000,000			

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FED. COST PHYSICAL DATA

Allocations to 30 September 2001	34,503,000			
Conference Allowance for FY 2002	17,000,000		McCook Reservoir	
Allocation for FY 2002	14,283,000 1/		Storage Capacity	21,400 acre-feet
Allocations through FY 2002	48,786,000	10	Thornton Reservoir	
•			Storage Capacity	14,600 acre-feet
Allocation Requested for FY 2003	10,000,000	11		
Programmed Balance to Complete after FY 2003	454,214,000			
Unprogrammed Balance to Complete after FY 2003	0			

<sup>1/</sup> Reflects \$2,717,000 reduction assigned as savings and slippage.

Division: Great Lakes & Ohio River District: Chicago McCook and Thornton Reservoirs, IL

JUSTIFICATION: The McCook and Thornton Reservoirs Project covers 341 square miles of the combined sewer area in Chicago and suburban communities. Within this region, over 500,000 homes suffer flooding attributable to sewer outfall submergence caused by the inadequate capacity of the area waterways. The McCook Reservoir will provide an additional 7 times the storage capacity of its billion gallon capacity connecting tunnel system and will provide flood damage reduction benefits to Chicago and 36 suburban communities where 146,000 homes and businesses flood annually. The Thornton Reservoir will provide an additional 8 times the storage capacity of its half billion capacity connecting tunnel system and will provide flood damage reduction to Chicago and 13 suburban communities where 35,000 homes and businesses flood annually. The project will also improve water quality in area waterways, reduce untreated sewage backflow into Lake Michigan and reduce beach closures. Average annual benefits are as follows:

Amount			
357,000			
732,000			
190,000			
030,000			
309,000			
(			

FISCAL YEAR 2003: The requested amount of \$10,000,000 will be applied as follows:

McCook Reservoir	
Continue construction on Pumps	\$ 7,000,000
Continue construction on Test Grout	1,000,000
Engineering & Design	1,000,000
Construction Management	500,000
Thornton Reservoir	
Engineering and Design	500,000
Total	\$ 10.000.000

Division: Great Lakes & Ohio River District: Chicago McCook and Thornton Reservoirs, IL

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation		Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
McCook Reservoir: Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.		\$ 6,083,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and facilities, where necessary for the construction of the project.	d other	23,664,000	
Pay 20 percent of the costs allocated to flood control to bring the total share of flood control costs to 25 percent and bear all costs of operation repair, rehabilitation and replacement of flood control facilities.		102,253,000	4,300,000
Total McCook Reservoir		\$132,000,000	\$4,300,000
Thornton Reservoir: Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.		\$ 8,763,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), other facilities, where necessary for the construction of the project.		820,000	
Pay approximately 18 percent of the costs allocated to flood control to non-Federal share of flood control costs to 25 percent and bear all cos maintenance, repair, rehabilitation and replacement of flood control face.	ts of operation,	29,417,000	1,278,000
Total Thornton Reservoir		\$ 39,000,000	\$1,278,000
Total Non-Federal		\$171,000,000	\$5,578,000
Division: Great Lakes & Ohio River	District: Chicago		McCook and Thornton Reservoirs, IL
	4 February 2002		83

STATUS OF LOCAL COOPERATION: The Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) is the local sponsor for the project. The Project Cooperation Agreement for McCook Reservoir was executed on 10 May 1999. PCA for Thornton Reservoir is scheduled for execution in the 4th quarter of FY 2003. The non-Federal sponsor is expected to make all required payments concurrently with project construction. The current non-Federal cost estimate of \$132,000,000, which includes a cash contribution of \$102,253,000 is an increase of \$2,950,000 from the non-Federal cost estimate of \$129,050,000 noted in the Project Cooperation Agreement, which included a cash contribution of \$99,978,000.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$513,000,000 is an increase of \$11,900,000 from the latest estimate (\$501,100,000) presented to Congress (FY 2002). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	\$11,900,000
Total	\$11,900,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Public and Agency review of final Environmental Impact Statement and the Special Re-evaluation Report (EIS/SRR) for the McCook Reservoir project was completed in December 1998. The Record of Decision (ROD) was signed on May 5, 1999.

OTHER INFORMATION: Funds to initiate PED were appropriated in FY 1988. Funds to initiate construction were appropriated in FY 1994. The scheduled completion date has been changed to September 2014 from September 2012, the latest completion date presented to Congress (FY 2002) due to budgetary constraints.

Division: Great Lakes & Ohio River District: Chicago McCook and Thornton Reservoirs, IL

SEPARABLE ELEMENT: McCook Reservoir, Illinois

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost \$395,000,000

Non-Federal Cost \$132,000,000

Cash Contributions \$ 102,253,000 Other Costs \$ 29,747,000

Total Estimated Project Cost \$527,000,000

REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 8 1/2 percent

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 8 1/2 percent

SEPARABLE ELEMENT: Thornton Reservoir, Illinois

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost \$117,750,000

Non-Federal Cost \$39,250,000

Cash Contributions \$29,667,000 Other Costs \$9,583,000

Total Estimated Project Cost \$157,000,000

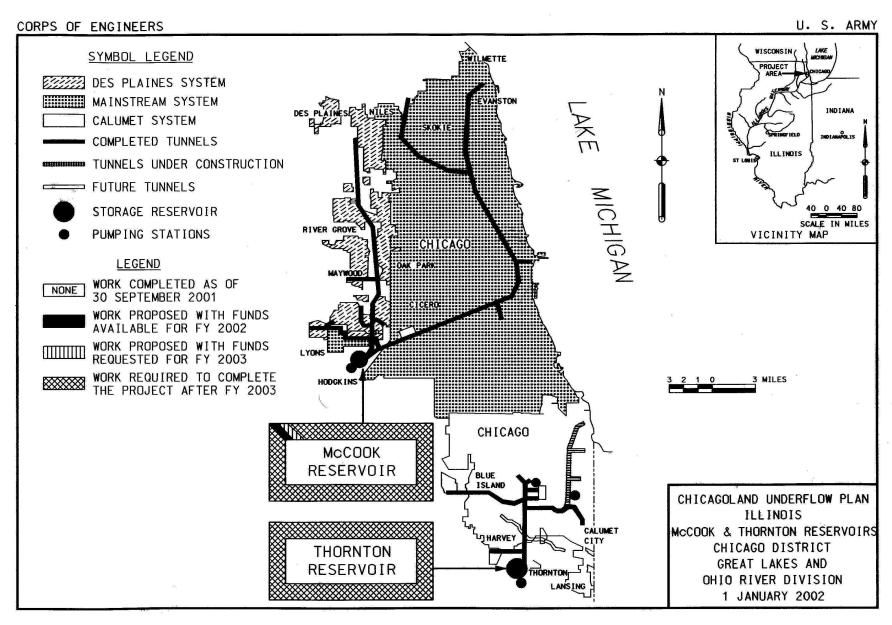
REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 8 1/2 percent

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 8 1/2 percent.

Division: Great Lakes & Ohio River District: Chicago McCook and Thornton Reservoirs, IL

4 February 2002

85



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Indianapolis, White River (North), Indiana (Continuing)

LOCATION: The project encompasses approximately 3.0 miles of the White River in the City of Indianapolis, Indiana.

DESCRIPTION: The recommended plan consists of a combination of floodwall and levee flood protection along approximately 3.0 miles of the east bank of the White River in Indianapolis. The project will be constructed in three phases. The first phase will consist of the rehabilitation of an existing pump station and the development of a flood warning plan and system. The second phase will consist of 2 mitigation sites totaling 37 acres of reforestation and mitigation. The third phase will consist of the construction of 19,150 feet of sheetpile floodwall with concrete facing and 1,220 feet of earthen levee.

AUTHORIZATION: Flood Control Act of 1936 as amended by the Flood Control Act of 1938, and subject to cost sharing provisions of the Water Resources Development Act of 1986.

REMAINING BENEFIT-COST RATIO: 4.2 to 1 at 7 1/8 percent

TOTAL BENEFIT-COST RATIO: 2.4 to 1 at 7 1/8 percent

INITIAL BENEFIT-COST RATIO: 2.42 to 1 at 7 1/8 percent (FY2000)

BASIS OF BENEFIT-COST RATIO: A Benefit Evaluation conducted in May 1997 at October 1995 price levels.

SUMMARIZED FINANCIAL [	DATA		STATUS (1 Jan 2002)	PERCEN COMPLET		ION
Estimated Federal Cost		\$ 12,855,000	Phase I Phase II	25 10	Sep 2002 Sep 2002	
Estimated Non-Federal Cost Cash Contribution Other Costs	3,024,000 1,261,000	4,285,000	Phase III Entire Project	10 10	Sep 2005 Sep 2005	
			PH	HYSICAL D	ATA	
Total Estimated Project Cost		\$ 17,140,000	Pump Station Rehab (Phase Flood Warning System (Phas Mitigation Sites (Phase II)	,	,	9,150 ft. 1,220 ft.

Division: Great Lakes & Ohio River District: Louisville Indianapolis, White River (North), IN

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT OF EST. FED. COST
Allocations to 30 September 2001	\$ 1,333,000	
Conference Allowance for FY 2002	3,600,000	
Allocation for FY 2002	2,075,000 1/	
Allocations through FY 2002	3,408,000	27
Allocation Requested for FY 2003	2,000,000	42
Programmed Balance to Complete after FY 2003	7,447,000	100
Unprogrammed Balance to Complete after FY 2003	\$ 0	

<sup>1/</sup> Reflects a reduction of \$575,000 as savings and slippage and \$950,000 reprogrammed from the project.

JUSTIFICATION: Urban expansion in Hamilton County to the north and Hancock County to the east is impacting hydrologic characteristics of the urbanized watersheds in Marion County. The flooding of January 1991 forced evacuation of 500 to 600 homes and damaged many more. Roadways were flooded causing severe damage and loss of access; and several serious injuries were reported. Based on current flood damage survey data, a 100-year annual flood event would cause damages of \$57,930,000 (1995 price levels) in the Warfleigh area. The recommended plan reduces average annual flood damages by 90 percent in the Warfleigh area. The recommended plan would have a 0.35% exceedance probability.

## Average annual benefits are as follows:

Amount
\$ 2,898,000
49,000
\$ 2,947,000

## FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Levees & Floodwall Contract	\$ 1,562,000
Planning, Engineering, and Design	65,000
Construction Management	373,000
Total	\$ 2,000,000

Division: Great Lakes & Ohio River District: Louisville Indianapolis, White River (North), IN

4 February 2002

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Const/Reimb	Annual OMRR&R Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 1,225,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	36,000	
Pay approximately 19 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of flood control facilities.	3,024,000	\$ 21,000
Total Non-Federal Costs	\$ 4,285,000	\$ 21,000

The non-Federal sponsor will be required to make all payments concurrently with project construction.

Floodplain Management Requirement.

A flood warning preparedness plan will provide significant benefit to the project area and will continue to be developed in close cooperation with City officials. In addition, the sponsor will be required to participate in and comply with applicable Federal Floodplain Management and Flood Insurance Programs in accordance with Section 402 of Public Law 99-662 as amended by Section 202(c) of Public Law 104-303. Finally, the sponsor will be required to publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in preventing unwise future development in the flood plain and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with protection levels provided by the project. The sponsor has an active flood plain management plan in place through the Indiana Department of Natural Resources.

Division: Great Lakes & Ohio River District: Louisville Indianapolis, White River (North), IN

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the City of Indianapolis, Indiana. The sponsor has provided all necessary local assurances for this stage of project development. The City of Indianapolis is a legally constituted public body with the full power, authority, and capability to perform the terms of the Project Cooperation Agreement (PCA). The terms of the PCA have been discussed with the sponsor and they understand their responsibilities. The PCA was executed in December 2000. The City of Indianapolis will fund its share of project costs through revenue generated from the flood district tax which is part of the property tax mechanism for the entire county.

The current non-Federal cost estimate of \$4,285,000, which includes a cash contribution of \$3,024,000 is an increase of \$10,000 from the non-Federal cost estimate of \$4,275,000 noted in the Project Cooperation Agreement, which included a cash contribution of \$3,014,000. In a letter dated 12 July 2000, the non-Federal sponsor indicated that it is financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The Federal Cost estimate of \$12,855,000 is an increase of \$49,000 from the latest estimate (\$12,806,000) presented to Congress (FY2002). The change includes the following items:

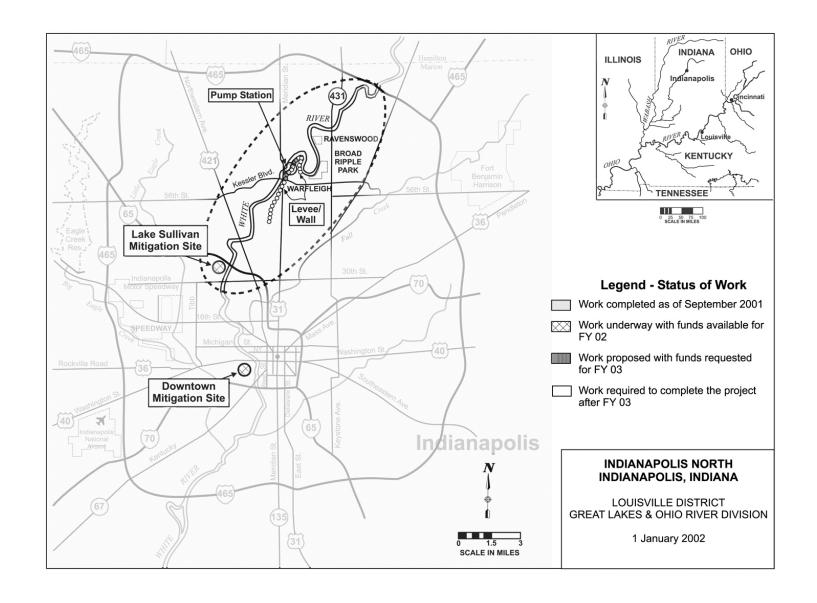
Item	Amount
Price Escalation on Construction Features	\$49,000
Total	\$49,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A draft Environmental Impact Statement was circulated in May 1996 to all concerned agencies and the public for review. A final EIS was completed in September 1996 incorporating agency and public comments.

OTHER INFORMATION: Funds to initiate Preconstruction Engineering and Design were received in FY 1996. Initial construction funds were received in FY 2000. Fish & Wildlife mitigation cost is \$103,600.

The scheduled completion date of September 2005 for programmed work is the same as the latest completion date presented to Congress (FY2002).

Division: Great Lakes & Ohio River District: Louisville Indianapolis, White River (North), IN



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Little Calumet River, Indiana (Continuing)

LOCATION: The Little Calumet River Basin, Northwest Indiana, Lake County.

DESCRIPTION: The project consists of replacing 9.5 miles of existing spoil bank levees with 12.1 miles of new levees, floodwalls, and closure and appurtenant structures between the Illinois-Indiana State line and Cline Avenue in Gary, Indiana; constructing 9.7 miles of set-back levees and appurtenant drainage structures; installing a flow control structure at Hart Ditch; permanent evacuation of 37 structures in the Black Oak area of Gary, Indiana; construct a betterment levee from Cline to Clark; modifying 7 miles of channel with 3 accompanying bridge culvert modifications; modifying 1 highway bridge; constructing 16.8 miles of hiking/biking trails and accompanying recreation support facilities, and preserving 788 acres of wildlife habitat. A Post Authorization Change Report was approved in May 1999 extending the eastern limit of the project to include the Marshalltown area.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 1.6 to 1 at 8 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 8 5/8 percent.

INITIAL BENEFIT-COST RATIO: 2.1 to 1 at 8 5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1994 at 1993 price levels.

Division: Great Lakes & Ohio River District: Chicago Little Calumet River, IN

SUMMARIZED FINANCIAL D	)ATA			STAT (1 Jar	US 1 2002)	PERCEN COMPLE	-		SICAL PLETION DULE
Estimated Federal Cost Estimated Non-Federal Cost		\$143,000,000 51,000,000		Entire	e Project	55		Sep 20	010
	2,420,000 8,580,000				PHYSICAL DATA				
Total Estimated Project Cost				PC	Levees and Floodwalls Pumping Plant Modification Structures Removed Structures Floodproofed Channel Modification Hiking Trails  ACCUM. PCT. OF EST. FED. COST			ons	21.8 miles 17 37 53 7 miles 6.8 miles
Allocations to 30 September 2 Conference Allowance for FY Allocation for FY 2002 Allocations through FY 2002			78,855,000 4,500,000 3,206,000 82,061,000	1/	57				
Allocation Requested for FY 2 Programmed Balance to Com Unprogrammed Balance to Co	plete After FY 2		3,562,000 57,377,000 0		60				

<sup>1/</sup> Reflects \$719,000 reduction assigned as savings and slippage, and \$575,000 reprogrammed from the project.

JUSTIFICATION: Overbank flood damages occur to 8,600 structures, primarily residential, along the Little Calumet River in Indiana within the communities of Hammond, Munster, Griffith and Gary. The total value of these structures is in excess of \$775 million. Flood damages also occur to commercial and public buildings, golf courses and the transportation network. The major highway transportation link between the Chicago metropolitan area and the eastern United States, Interstate 80/94, is susceptible to closure beginning at a 40-to 50-year flood event. Average annual benefits (October 1993 price levels) are estimated at

Division: Great Lakes & Ohio River District: Chicago Little Calumet River, IN

#### JUSTIFICATION: (continued)

\$18,607,000. The project will provide essentially a 200-year level of flood protection. An estimated \$35 million in flood damages were incurred and one life lost in the November 1990 flood, the most recent significant flood event. The communities of Hammond, Highland and Munster, IN were inundated. The President declared the area inundated by the November 1990 flood a National Disaster Area on December 6, 1990. The State of Indiana continues to rate the flood damage potential along the Little Calumet River as the most severe in the state. The project avoids the short-and long-term adverse impacts associated with the destruction or modification of wetlands by designating the existing wetland areas in the Gary reach for overbank flood storage, a vital requirement of the hydraulic operation and design of the project, and hence required project lands. Environmental attributes are being mitigated for, as well as, enhanced along the river corridor. Lake County, Indiana qualifies as an area of persistent and chronic unemployment. A minority plan has been developed that identifies construction contracts which can be set aside for small business contractors and minority owned/Section 8A contractors who exist in the project area. A 40 percent minority participation goal has been established for all future construction contracts for the Contractor's aggregate workforce in each trade. The project will create 424 man-years of labor during the construction period.

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Prevention Recreation Land Enhancement	\$15,917,000 468,000 2,222,000
Total	\$18,607,000

FISCAL YEAR 2003: The requested amount of \$3,562,000 will be applied as follows:

Construction Contracts	\$2,262,000
Engineering and Design	1,100,000
Construction Management	200,000
Total	\$ 3,562,000

Division: Great Lakes & Ohio River District: Chicago Little Calumet River, IN

4 February 2002

NON-FEDERAL COST: In accordance with the cost sharing and financing requirements contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$19,373,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project, which may be reduced for credit allowed based on prior work (Section 10 of the Water Resource Development Act of 1986) after reductions for succredit have been made in the required cash payments.		
Pay one-half separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities;	2,500,000	
Pay 5 percent of the costs allocated to flood control (other than non-structural measures) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	7,843,000	150,000
Pay 25 percent of the first cost allocated to non-structural flood control measures.	1,877,000	
Pay 25 percent of the costs allocated to fish and wildlife enhancement, and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation and replacement of the fish and wildlife facilities.	200,000	
Total Non-Federal Costs	\$51,000,000	\$ 150,000

Division: Great Lakes & Ohio River District: Chicago Little Calumet River, IN

4 February 2002

95

STATUS OF LOCAL COOPERATION: The Little Calumet River Basin Development Commission is the local sponsor for the project. The Local Cooperation Agreement (LCA) was executed on August 16, 1990. The LCA was supplemented twice to include the East Reach Remediation, 30 July 1999 and Burr Street Betterment, 26 April 2000. The current non-Federal cost estimate of \$51,000,000, which includes a cash contribution of \$12,420,000, is an increase of \$27,400,000 from the non-Federal cost estimate of \$23,600,000 noted in the Local Cooperation Agreement, which included a cash contribution of \$4,800,000. The non-Federal sponsor is financially capable and willing to contribute the non-Federal share. The local sponsor has received approval for Section 104 credits in the amount of \$1,667,200.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$143,000,000 is an increase of \$4,000,000 from the latest estimate (\$139,000,000) presented to Congress (FY 2002). This change includes the following items:

Item Amount

Price Escalation on Construction Features \$ 4,000,000

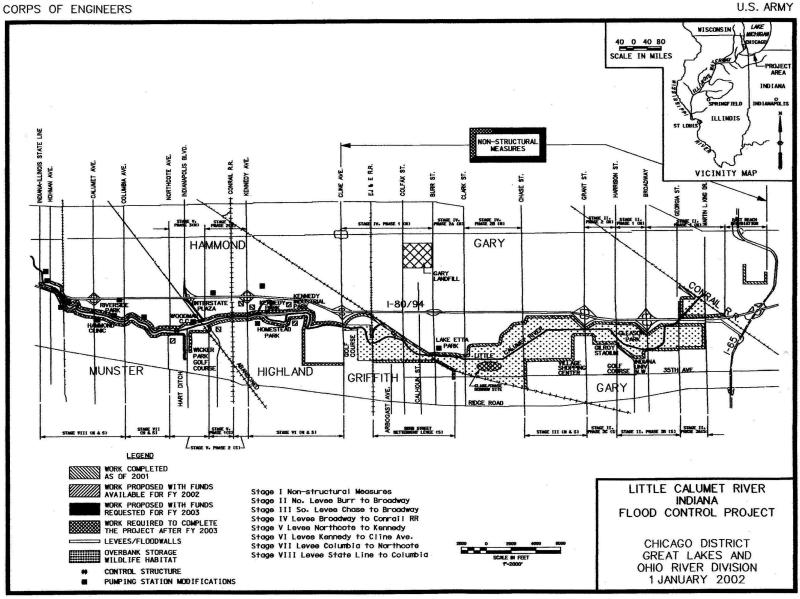
Total \$ 4,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the United States Environmental Protection Agency on February 3, 1984. The Record of Decision was signed on July 13, 1990. Environmental Assessments (EA) were subsequently prepared addressing potential borrow and disposal sites which were not covered in the EIS and the three Findings of No Significant Impact which were signed by the District Engineer on May 9, 1990, July 11,1991 and April 21, 1992. A supplemental Environmental Impact Statement was completed for the levee re-alignment, excavated ponding areas and new borrow sites. The Record of Decision was signed on June 23, 1995.

OTHER INFORMATION: Funds to initiate PED were appropriated in FY 1984 and funds to initiate construction were appropriated in FY 1990. Fish and wildlife mitigation and enhancement costs for this project are estimated at \$4,493,000. A 902 PAC report was approved by HQUSACE on 5 December 2000.

The scheduled completion date of September 2010 is unchanged from the latest completion date presented to Congress (FY 2002).

Division: Great Lakes & Ohio River District: Chicago Little Calumet River, IN



APPROPRIATION TITLE: Construction, General (Flood Control)

PROJECT: Ohio River Greenway Public Access, Indiana (Continuing)

LOCATION: The Ohio River Greenway is a seven-mile linear corridor that extends from the City of Jeffersonville through the Town of Clarksville to the City of New Albany, Indiana, along the Ohio River Shoreline. The project extends from Ohio River Mile 602 to Ohio River Mile 609. The corridor adjoins the McAlpine Locks and Dam project and the Falls of the Ohio National Wildlife Conservation Area on the Indiana side of the river.

DESCRIPTION: Federal participation in discrete recreation facilities is authorized, but these facilities will not be implemented as part of the project. The main project features consist of a vehicular parkway, pedestrian and multi-use paths, a bridge, and two levee cuts for additional access to the river. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT-COST RATIO: 2.2 to 1 at 6 7/8 percent

TOTAL BENEFIT-COST RATIO: 2.0 to 1 at 6 7/8 percent

INITIAL BENEFIT-COST RATIO: 2.0 to 1 at 6 7/8 percent

BASIS OF BENEFIT-COST RATIO: Economic Analysis, Report on the Ohio River Greenway Corridor, dated January 2000 at 1 Oct 1999 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$ 17,500,000	Entire Project	6	Sep 2007
Estimated Non-Federal Cost Cash Contribution Other Costs	10,666,000 6,834,000	17,500,000	Levee Cuts Roadway	PHYSICAL DA	ATA 85 ft. 7 mi.
Total Estimated Project Cost		\$ 35,000,000	Trails/Paths Gates Bridge		14 mi. 2 1

ACCUM. PCT. OF EST. FED. COST

### SUMMARIZED FINANCIAL DATA (Continued)

Division: Great Lakes & Ohio River

Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002	\$ 2,057,000 2,400,000 2,016,000 1/ 4,073,000	23
Allocation Requested for FY 2003 Programmed Balance to Complete after FY 2003 Unprogrammed Balance to Complete after FY 2003	732,000 12,695,000 \$ 0	27 100

<sup>1/</sup> Reflects \$384,000 reduction assigned as savings and slippage.

JUSTIFICATION: The primary purpose of this project is to enhance public access to the amenities of the Ohio River in the vicinity of the local flood protection project. After the 1937 flood, which caused considerable damage to the southern Indiana communities of Jeffersonville, Clarksville, and New Albany, the Federal Government participated in the construction of a flood damage reduction project to protect these communities from future flooding. The existing local protection project, which consists of approximately eight miles of earth levee, 2.5 miles of concrete wall, and 16 pumping plants, is operated and maintained by these three communities. The series of earth levees and concrete floodwalls was constructed between 1937 and 1953 and protects approximately 80,000 residents and physically separates them from the river. The local flood protection project continues to serve its function, however, it separates or cuts off the communities from the riverfront and provides them with limited access for operation and maintenance of the facilities. If constructed today, the project would provide the local communities opportunities to more efficiently operate and maintain the existing flood control facilities and provide better access to the amenities of the Ohio River.

Average annual benefits are as follows:	Annual Benefits	Amount
	Access	\$ 6,958,000
	Total	\$ 6,958,000
FISCAL YEAR 2003: The requested amoun	t will be applied as follows:	
	Continue Construction of the Clarksville Project Planning, Engineering, and Design Construction Management	\$ 510,000 182,000 40,000
	Total	\$ 732,000

District: Louisville Ohio River Greenway Public Access, IN

4 February 2002

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in Water Resources Development Act 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation Maintenance, Repair Rehabilitation and Replacement Costs
Provide lands, easements, rights of way, relocations, and dredged material disposal areas.	\$ 5,191,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	1,643,000	
Pay 33.9 percent of the costs allocated to access facilities, as reduced for credit to allow for non-Federal work, to bring the total non-Federal share of costs to 50 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of access facilities.	10,666,000	\$ 809,000
Total Non-Federal Costs	\$ 17,500,000	\$ 809,000

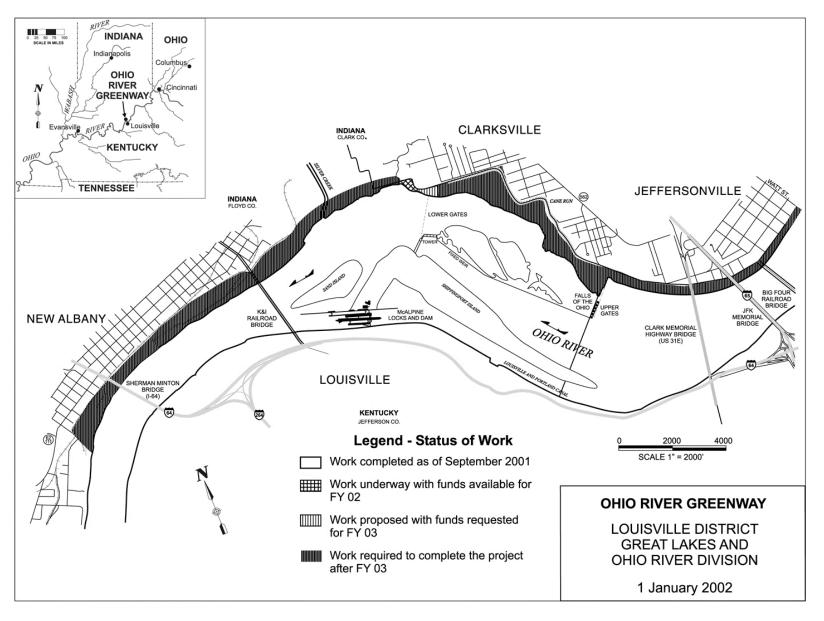
STATUS OF LOCAL COOPERATION: There are four non-Federal sponsors: The Ohio River Greenway Development Commission, the City of New Albany, the Town of Clarksville, and the City of Jeffersonville. Each has sent in Letters of Intent, dated 17 December 1999, indicating their williness to enter into binding agreements with the Federal Government to fulfill the required items of local cooperation. The Project Cooperation Agreement is scheduled for execution in FY 2002. The local sponsors have spent about \$1 million on the access road to this point, using mainly local funds. The Greenway Commission and local communities have recently obtained over \$3 million in grant funds that will be used for the project. The sponsors' source of funding will mainly come from state and local sources.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$17,500,000 is the same as the latest estimate (\$17,500,000) presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: No Environmental Impact Statement is required. An Environmental Assessment and Finding of No Significant Impact was completed in January 2000.

OTHER INFORMATION: The Ohio River Greenway Project was approved for construction by the ASA (CW) in April 2000. Funds to initiate preconstruction, engineering and design were first appropriated in FY 1993 and funds to initiate construction were first appropriated in FY 2001.

The scheduled completion date of September 2007 is the same as last presented to Congress (FY2002).



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Metropolitan Louisville, Beargrass Creek, KY (Continuing)

LOCATION: The project is located in eastern Jefferson County in the suburbs of Louisville, Kentucky, along the South Fork Beargrass Creek and Buechel Branch.

DESCRIPTION: The project consists of construction of eight detention basins, about 2,000 linear feet of channel improvement, and 1,400 linear feet of floodwall/levee on the South Fork of Beargrass Creek and Buechel Branch. The project will provide protection to 830 structures (combination of residential and commercial). Of those structures, 314 will be removed from the 100-year flood plain. The 100-year flood will be reduced an average of 1.5 feet, as a result of project implementation. All work is programmed.

AUTHORIZATION: The Water Resource Development Act of 1999.

REMAINING BENEFIT-COST RATIO: 5.8 to 1 at 6 7/8 percent.

TOTAL BENEFIT-COST RATIO: 2.7 to 1 at 6 7/8 percent.

INITIAL BENEFIT-COST RATIO: 2.7 to 1 at 6 7/8 percent (FY 2001)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Final Feasibility Report dated September 1997 at October 1996 price levels.

Division: Great Lakes & Ohio River District: Louisville Metropolitan Louisville, Beargrass Creek, KY

SUMMARIZED FINANCIAL DA	NTA		ACCUM. PCT OF EST FED. COST	STATUS (1 Jan 2002)	PHYSICA L PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost		\$ 8,085,000		Entire Project	20	Sep 2004
Estimated Non-Federal Cost  Cash Contribution	1,197,000	\$ 4,353,000		PHYS	ICAL DATA	
Other Costs	3,156,000			Floodwall/Leve Channel Impro Detention Basi	vement	1,400 feet 2,000 feet 8
Total Estimated Project Cost		\$12,438,000				•
Allocations to 30 September 20 Conference Allowance for FY 2 Allocation for FY 2002 Allocations through FY 2002		\$ 690,000 2,575,000 2,163,000 1/ 2,853,000	35			
Allocation Requested for FY 20 Programmed Balance to Comp Unprogrammed Balance to Col	lete after FY 2003	3,838,000 1,394,000 \$ 0	83 100			

<sup>1/</sup> Reflects a reduction of \$412,000 assigned as savings and slippage.

Division: Great Lakes & Ohio River

District: Louisville

Metropolitan Louisville, Beargrass Creek, KY

4 February 2002

103

JUSTIFICATION: Approximately 26 percent of Jefferson County's population resides in the Beargrass Creek Basin. In recent years, the great majority of the 60 square mile basin has been developed. The value of development in the study area is estimated at \$500,000,000. Stream reaches of the South Fork of Beargrass Creek are subject to inundation as a result of insufficient in-bank flowage areas and increased runoff from upstream development. Upstream industrial, commercial, and residential development also has contributed to increased storm runoff and flooding on South Fork Beargrass Creek. Major floods occurred in the basin in 1960, 1964, 1970, 1973, and 1997. Based on October 1995 prices and conditions, a 100-year frequency flood in the basin would result in approximately \$55 million in damages to 929 structures. The March 1997 flood inflicted an estimated \$8 million in damages within the basin. The average annual benefits amount to \$2,368,000, all for flood damage reduction.

Average annual benefits are as follows:

	Annual Benefits	Amount
	Flood Damage Reduction	\$ 2,368,000
	Total	\$ 2,368,000
FISCAL YEAR 2003: The requested amoun	nt will be applied as follows:	
	Continue Channels, Canals, & Basins Continue Levees Continue Fish & Wildlife Construction Management	\$ 3,181,000 390,000 58,000 209,000
	Total	\$ 3,838,000

104

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments during Construction and Reimbursements	Annual Operation Maintenance, Repair Rehabilitation and Replacement Costs
Provide lands, easements, rights of way, and dredged material	\$ 3,014,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	142,000	
Pay 9.6 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 35 percent and bear all costs of operation, maintenance, repair, and rehabilitation.	1,197,000	\$ 24,000
Total Non-Federal Costs	\$ 4,353,000	\$ 24,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal cost sharing partner is the Louisville and Jefferson County Metropolitan Sewer District (MSD). MSD cost shared the feasibility phase of the project. A PED phase cost sharing agreement with MSD was executed in January 1998. The Chief of Engineers report approved the project in May 1998. A Project Cooperation Agreement (PCA) with MSD was executed in September 2001.

The current non-Federal cost estimate of \$4,353,000, which includes a cash contribution of \$1,197,000, is an increase of \$71,000 from the non-Federal cost estimate of \$4,282,000 noted in the PCA, which included a cash contribution of \$1,182,000. This increase is due to price escalation of the project's construction features. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

Division: Great Lakes & Ohio River District: Louisville Metropolitan Louisville, Beargrass Creek, KY

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$8,085,000 is an increase of \$134,000 in the last estimate (\$7,951,000) presented to Congress (FY2002). The change includes the following items:

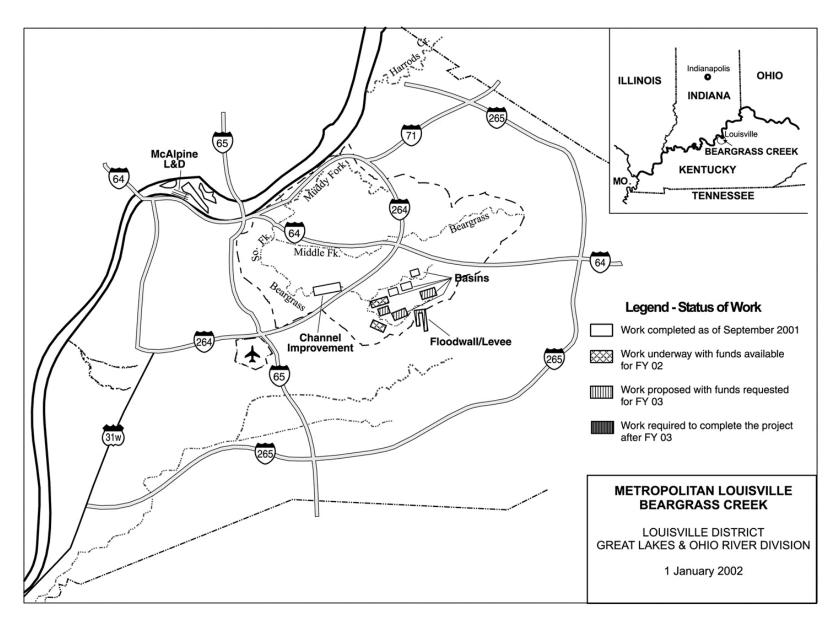
Item	Amount
Price Escalation on Construction Features	\$ 134,000
Total	\$ 134 000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was prepared and circulated for review. A Finding Of No Significant Impact was signed in September 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2001. The project is scheduled for construction award in April 2002.

The scheduled completion date of September 2004 had not changed from the last date presented to Congress (FY 2002).

Division: Great Lakes & Ohio River District: Louisville Metropolitan Louisville, Beargrass Creek, KY



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Metropolitan Louisville, Pond Creek, Kentucky (Continuing)

LOCATION: The project is located in the central and eastern portions of the 126 square mile Pond Creek watershed, in southern Jefferson County, Kentucky.

DESCRIPTION: The project consists of construction of detention basin storage at the Melco Detention Basin on Northern Ditch and the Vulcan Quarry Detention Basin on Fishpool Creek; channel enlargement along approximately 2.4 miles of Pond Creek and 1.5 miles of Northern Ditch; a multipurpose maintenance road/hiking trail along the Pond Creek channel improvement; and a fifteen acre wetlands environmental restoration component at a site owned by the local sponsor. All work is programmed.

AUTHORIZATION: The Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 9.9 to 1 at 7 3/4 percent.

TOTAL BENEFIT-COST RATIO: 2.3 to 1 at 7 3/4 percent.

INITIAL BENEFIT-COST RATIO: 2.78 to 1 at 7 3/4 percent (FY 1997).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Project Design Memorandum, dated May 1995, at 1995 price levels.

SUMMARIZED FINANCIAL	DATA		ACCUM PCT OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$13,524,000		Entire Project	66	Sep 2004
Estimated Non-Federal Cost Cash Contribution	1,258,000	5,776,000			PHYSICAL DATA	
Other Costs	4,518,000			Channel Improve		3.9 miles
Total Estimated Project Cost		\$19,300,000		Detention Basin Wetlands Env. R Maint. Rd/Hike-E Permanent Ease	estoration like Trail	2 @ 1,600 acre/ft 15 acres 3.4 miles 65.7 acres

.

Allocations to 30 September 2001	\$ 8,029,000	
Conference Allowance for FY 2002	1,400,000	
Allocation for FY 2002	976,000 1/	
Allocations through FY 2002	9,005,000	67
Allocation Requested for FY 2003	2,000,000	81
Programmed Balance to Complete after FY 2003	2,519,000	100
Unprogrammed Balance to Complete after FY 2003	\$ 0	

<sup>1/</sup> Reflects \$224,000 assigned as savings and slippage and reprogramming from the project of \$200,000.

JUSTIFICATION: The project is located in southwestern Jefferson County, Kentucky, and drains an area of approximately 71 square miles. Approximately 5,500 structures are located within the highly urbanized Pond Creek flood plain. Due to rapid residential and commercial development within the area, properties along Pond Creek and tributaries now have only a two-year level of protection, leaving residential, commercial, and industrial structures vulnerable to disastrous flash floods. The flood of record occurred in March 1964. A recurrence of this flood today would result in damages of approximately \$106 million, under 1995 price levels and conditions of development. The most recent flood experienced in the basin was between a 50 and 100-year flood event, occurred in March 1997, and caused damages to residential and commercial properties in the basin that totaled approximately \$201 million.

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control Recreation	\$ 3,999,000 76,000
Total	\$ 4,075,000

FISCAL YEAR 2003 The requested amount will be applied as follows:

Continue Lands and Damages Federal Administration	\$	2,000
Continue Channels and Canals	1,	689,000
Continue Recreation Contract		105,000
Planning, Engineering, and Design		62,000
Construction Management		142,000
Total	\$ 2,	000,000

District: Louisville

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Const/Reimb	Annual OMRR&R Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal area.	\$ 4,518,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.		
Pay approximately 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 29 percent and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of flood control facilities, which meets mandatory 5% cash requirement plus total of all LERRD credits.	874,000	\$ 68,000
Pay one-half of the separable costs allocated to recreation and bear all costs to operate, maintain, repair, replace, and rehabilitate recreation facilities.	245,000	1,000
Pay approximately 22.7 percent of the costs allocated to environmental restoration to bring the total non-Federal share of environmental restoration costs to 25 percent and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of environmental restoration facilities.	139,000	1,000
Total Non-Federal Costs	\$ 5,776,000	\$ 70,000

The non-Federal sponsor has agreed to make all payments concurrently with project construction.

Division: Great Lakes & Ohio River District: Louisville Metropolitan Louisville, Pond Creek, KY

STATUS OF LOCAL COOPERATION: The non-Federal cost sharing partner is the Louisville and Jefferson County Metropolitan Sewer District (MSD). The MSD participated in the Feasibility Study for the Pond Creek project and has filed a Letter of Intent and Financial Capability Statement regarding its intention to cost share in the project. MSD also has furnished a copy of its Operating and Capital Budget Plan, which contains funding provisions for the project.

The Project Cooperation Agreement was executed in March 1998. The current non-Federal cost estimate of \$5,776,000, which includes a cash contribution of \$1,295,000, is an increase of \$534,000 from the non-Federal cost estimate of \$5,242,000 noted in the Project Cooperation Agreement, which included a cash contribution of \$1,074,000. This increase is due to rising real estate costs and price escalation to the project's construction features. The non-Federal sponsor continues to demonstrate they have a reasonable and implementable plan for meeting their financial commitment.

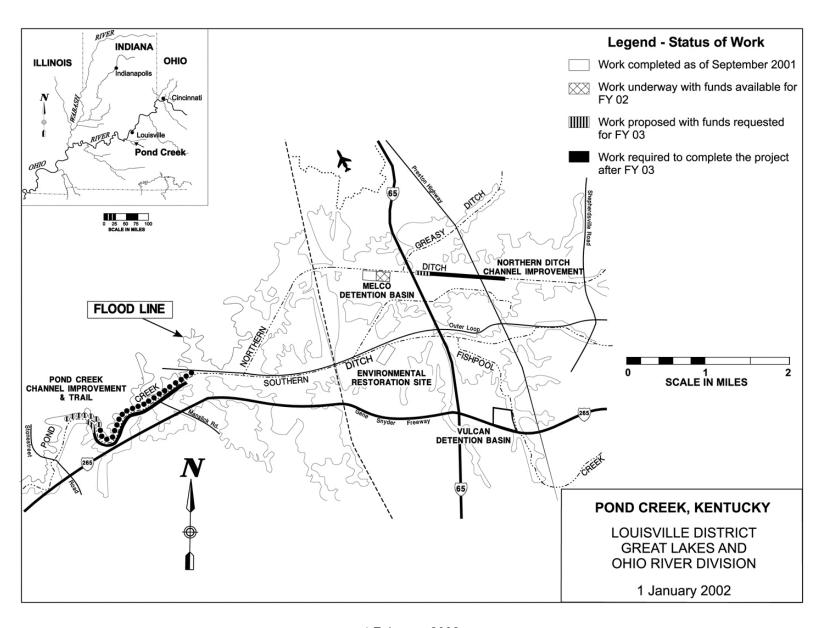
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$13,524,000 is the same as the latest estimate (\$13,524,000) presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment and a Finding of No Significant Impacts (FONSI) have been signed and were included in the Interim Feasibility Report, dated March 1994. In addition, a Section 404(b)(1) Evaluation has been completed and a 401 Water Quality Certification has been obtained from the Kentucky Division of Water.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1994 and funds to initiate construction were appropriated in FY 1997.

The scheduled completion date has been changed from December 2004, the latest completion date presented to Congress (FY 2002), to September 2004 due to reduced requirements for real estate acquisitions which has advanced the award date of the Phase 4 construction contract.

Division: Great Lakes & Ohio River District: Louisville Metropolitan Louisville, Pond Creek, KY



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Metropolitan Region of Cincinnati, Duck Creek, Ohio (Continuing)

LOCATION: The project encompasses 3.2 miles of stream reach in the City of Cincinnati and the Village of Fairfax, in Hamilton County, Ohio.

DESCRIPTION: The recommended plan consists of 1,200 feet of stream channel relocation; 8,500 feet of streambank protection; 3,300 feet of earth levees; 7,100 feet of concrete floodwalls; 1,100 feet of triple box culvert, widening of one railroad bridge; demolition of one abandoned highway bridge; one pump station for interior drainage; one automated floodgate closure; one emergency access road; one flood emergency warning system; 32.1 acres of permanent easements and 10.0 acres of temporary easements; and environmental mitigation. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1996 and Water Resources Development Act of 2000.

REMAINING BENEFIT-COST RATIO: 1.4 to 1 at 7 3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.01 to 1 at 7 3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.26 to 1 at 7 3/4 percent (FY 1997).

BASIS OF BENEFIT-COST RATIO: Project Design Memorandum for Duck Creek, Ohio, dated January 1996, at January 1996 price levels. An economic update of the Duck Creek, Cincinnati, OH study was completed in September 2000 at October 2000 price levels.

Division: Great Lakes & Ohio River District: Louisville Metropolitan Region of Cincinnati, Duck Creek, OH

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	С	HYSICAL OMPLETION CHEDULE	
Estimated Federal Cost	\$ 32,945,000		Entire Project	18		Sep 2007	
Estimated Non-Federal Cost Cash Contribution Other Costs  Total Estimated Project Cost	4,200,000 1,816,000 2,384,000 \$ 37,145,000		Levees Floodwalls Channel Relocat Streambank Pro Triple Box Culve	tion tection	3,300 ft. 7,100 ft. 1,200 ft. 8,500 ft. 1,100 ft.	Access Road Widen R.R. Bridge Pump Station Permanet Easements Demolish Hwy Bridge	
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002 Allocation Requested for FY 2003 Programmed Balance to Complete after Unprogrammed Balance to Complete after		1/ 19 29 100					

<sup>1/</sup> Reflects a reduction of \$432,000 as savings and slippage and \$800,000 reprogrammed from the project

Division: Great Lakes & Ohio River District: Louisville Metropolitan Region of Cincinnati, Duck Creek, OH

JUSTIFICATION: Duck Creek suffers from frequent flash flooding affecting roads, utilities, 9 residential properties, and 32 commercial/industrial properties valued at \$62.4 million; threatens over 1,000 jobs in manufacturing; and disrupts production. The most recent out-of-bank flooding causing property damage occurred in June 1997 and July 2001. Threatening flood conditions occurred 5 times in a four-month period during 1991, with plant closures during at least one of these events. The potential for frequent damaging floods and for less frequent but catastrophic flooding exists during any given year. Additional significant flooding occurred in 1982 and 1985. These two floods are estimated to have been a 25-year frequency event and a 10-year frequency event, respectively. A recurrence of these floods would cause damages estimated at \$5.6 million and \$1.2 million, respectively, in 1995 price levels and conditions of development. The recommended plan reduces average annual flood damages by 94 percent. The recommended plan provides a uniform 100-year level of protection for the three protected areas.

# Average annual benefits are as follows

Annual Benefits	Amount
Flood Control Advance Bridge Replacement Location	\$ 3,874,000 64,000 9,000
Total	\$ 3,947,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Wildlife Facilities Contract	\$ 20,000
Continue Phase III Construction Contract	2,728,000
Federal Land Payments	153,000
Continue Planning, Engineering and Design	121,000
Construction Management	248,000
Total	\$ 3.270.000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 and modified by the Water Resources Development Act of 2000, the non-Federal sponsor must comply with the requirements listed below.

Division: Great Lakes & Ohio River District: Louisville Metropolitan Region of Cincinnati, Duck Creek, OH

Requirements of Local Cooperation	Payments During Const/Reimb	Annual OMRR&R Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 2,302,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	82,000	
Pay approximately 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, replacement, and rehabilitation. of flood control facilities.	1,816,000	\$ 55,000
Total Non-Federal Costs	\$ 4,200,000	\$ 55,000

The non-Federal sponsors have agreed to make all payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal sponsors are the City of Cincinnati, Ohio, and the Village of Fairfax, Ohio. The terms of the Project Cooperation Agreement (PCA) have been discussed with each sponsor and each understands its responsibilities. The PCA was executed in December 1997. A PCA amendment to support the new authorized total project cost and maximum non-federal cost is scheduled to be executed in July 2002. In May, 1993, the Cincinnati City Council approved a rate increase by the Cincinnati Stormwater Management Utility that included funds for the city's share of project costs. The Village of Fairfax has acquired and is acquiring the necessary Right-of-Way for construction of the project.

The current non-Federal cost estimate of \$4,200,000, which includes a cash contribution of \$1,816,000, is the same as the last non-Federal cost estimate presented to Congress (FY 2002). The cost estimate reflects the project's modified authorization in Water Resources Development Act of 2000 which capped the non-Federal sponsor's costs.

Division: Great Lakes & Ohio River District: Louisville Metropolitan Region of Cincinnati, Duck Creek, OH

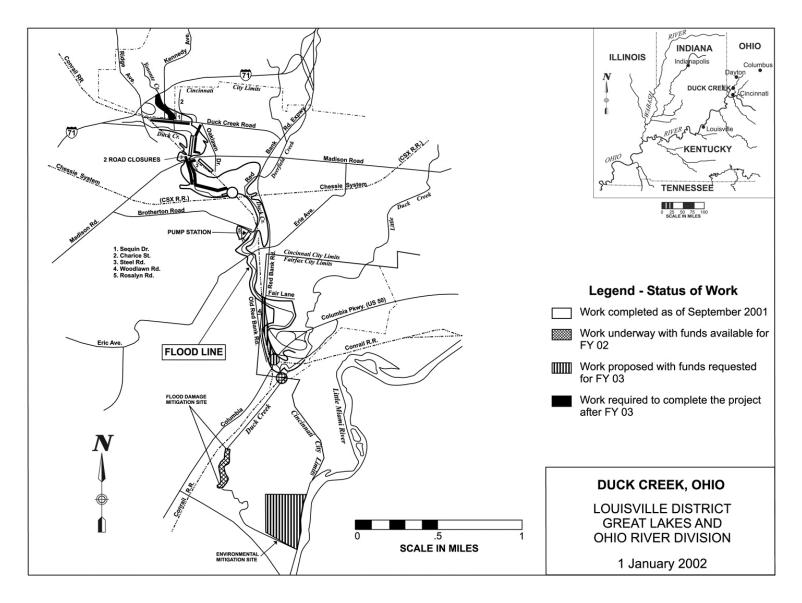
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$32,945,000 is an increase of \$822,000 from the latest estimate (\$32,123,000) presented to Congress (FY 2002). The change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 822,000
Total	\$ 822,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment was conducted and a Finding of No Significant Impact was signed on 14 January 1994.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1994. Funds to initiate construction were appropriated in FY 1997.

The scheduled completion date of September 2007 is the same as the last date presented to Congress (FY2002).



119

APPROPRIATION TITLE: Construction, General - Local protection (Flood Control)

PROJECT: Mill Creek, Ohio (Continuing)

LOCATION: The project is located along a 17.5 mile length of Mill Creek in Hamilton County, Ohio, and the 3/4-mile length of East Fork in Hamilton County, Ohio. Lower Mill Creek is in the commercial and industrial heart of the Cincinnati metropolitan area in the southwestern portion of the State.

DESCRIPTION: The project includes 17.5 miles of channel improvement, 2 miles of levees, 3 pumping plants, modification of highway and railroad bridges, and the addition of 2 pumping units at the existing Mill Creek barrier dam. A paved greenbelt within the channel right-of-way will be provided for high-density urban oriented recreational use. Approximately, 6.1 miles of channel improvement and the addition of 2 pumping units at the existing barrier dam have been completed. A General Reevaluation Report and completion of "punch list" items for Section 3 are programmed. All other remaining work is unprogrammed.

AUTHORIZATION: 1970 Flood Control Act

REMAINING BENEFIT-REMAINING COST RATIO: 3.8 to 1 at 5-5/8 percent.

TOTAL BENEFIT-COST RATIO: 3.3 to 1 at 5-5/8 percent.

INITIAL BENEFIT-COST RATIO: 3.2 to 1 at 5-5/8 percent (FY 1975).

BASIS OF BENEFIT-COST RATIO: Design Memorandum No. 3, approved in September 1975 at 1975 price levels.

Division: Great Lakes & Ohio River District: Louisville Mill Creek, OH

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Programmed Construction Unprogrammed Construction Estimated Non-Federal Cost Programmed Construction	\$ 163,000,000 109,024,000 53,976,000 \$ 51,210,000 15,843,000	Section Entire F	al Reevaluation Repor n 3 Punch List Items Project	t 40 0 62	Jun 2004 Sep 2004 Indefinite
Cash Contribution 919,000 Other Costs 14,924,000	13,043,000		PHYSICAL I	DATA	
Estimated Non-Federal Cost Unprogrammed Construction Cash Contributions 4,867,000 Other Costs 30,500,000	35,367,000	Levees Pumpin Relocat	ng Plants	17.5 miles 2 miles 3	
Total Estimated Programmed Construction Construction Contract Estimated Unprogrammed Construction Contract Estimated Project Cost		Hwy	& Road Bridges	17	
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations thru FY 2002	\$ 101,403,000 3,000,000 2,521,000 103,924,000	<u>1</u> /			
Allocation Requested for FY 2003 Programmed Balance to Complete after FY 20 Unprogrammed Balance to Complete after FY		100			

<sup>1/</sup>Reflects a reduction of \$479,000 assigned as savings and slippage.

JUSTIFICATION: The project would protect the Mill Creek Basin from residual flood damages resulting from headwater flooding. On the average, damaging headwater floods occur about twice yearly. As the result of the small size of the Mill Creek drainage area, the basin is potentially subject to severe flooding from any type storm with limited time available for evacuation. The area contains about 3,000 acres of intensively developed land and a broad mix of industrial,

Division: Great Lakes & Ohio River District: Louisville Mill Creek, OH

commercial, and residential development, and a complex network of transportation facilities including roads, streets, interstate highways, extensive railroad yards, truck and spur lines, and utilities. Large volumes of toxic substances are stored and utilized in the flood plain by manufacturers. Flammable and volatile liquids are also present in the flood plain in large quantities. Flooding creates extreme hazards in the areas of public health, fire, and explosion. The value of property in the flood plain of Hamilton County is about \$2.7 billion (1989 values). About 5,000 persons reside and 20,000 persons are employed in the flood plain. However, the entire population of the metropolitan area of Cincinnati is adversely affected by Mill Creek flooding. The maximum flood of record occurred in March 1913 and the January 1959 flood was the second largest flood of record. A recurrence of the January 1959 flood, under current conditions of development, would cause damages estimated at \$26,661,000 (1992 values). Damaging floods also occurred in September 1979, May 1996, April 1998, and July 2001.

The project would provide protection for the developed portions of the Mill Creek flood plain for a flood having a frequency of one or more occurrences every 100 years from the barrier dam (stream mile 0.3) upstream to I-275 (stream mile 18.2). In addition, the project would provide specific-use recreation activities along the length of the Mill Creek main stem in Hamilton County.

Average annual benefits are estimated at \$18,865,000 based on January 1975 price levels.

Annual Benefit	Amount
Flood Control Recreation	\$ 18,295,000 570,000
Total	\$ 18,865,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue General Reevaluation Report	\$ 600,000
Continue Section 3 Construction Punch List Items	500,000

Total \$ 1,100,000

Division: Great Lakes & Ohio River District: Louisville Mill Creek, OH

NON-FEDERAL COSTS: In accordance with cost sharing and financing concepts reflected in the 1970 Flood Control Act, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide all of lands, easements, and right-of-way of flood control facilities	\$ 16,278,000	
Modify or relocate bridges (except railroad bridges) and utilities where necessary in construction of the project and bear all costs for operation, maintenance and replacement of flood control facilities.	29,146,000	\$ 120,000
Pay a portion of the cost of the recreation facilities which, when added to the cost of recreation lands, would amount to 50 percent of the separable cost of recreation.	5,786,000	119,000
Total Non-Federal Costs	\$ 51,210,000	\$ 239,000

#### STATUS OF LOCAL COOPERATION:

The Millcreek Valley Conservancy District is the responsible cooperating agency for all required assurances.

An assurance agreement covering local cooperation requirements for the project consistent with Section 221 of the 1970 Flood Control Act and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 was executed by the Conservancy District on 6 February 1975 and for the Secretary of the Army on 28 March 1975. A recreation cost-sharing contract was executed by the Conservancy District 25 February 1975 and approved for the Secretary of the Army 28 May 1975.

Ohio Department of Natural Resources permits relating to construction of the various sections of the entire Mill Creek project have been either procured or waived.

The authorization-of-entry for Sections 7A, 3, 2, 4A, and 1 were executed by the local sponsor 20 September 1979, 14 December 1981, 20 June 1983, 24 March 1986, and 11 September 1989, respectively.

An Operation and Maintenance Agreement, wherein the Millcreek Valley Conservancy District assumes responsibility for sections for which "punch list" work has been completed, was executed on 7 August 1998.

Division: Great Lakes & Ohio River District: Louisville Mill Creek, OH

### STATUS OF LOCAL COOPERATION: (continued)

A Contributed Funds Memorandum of Agreement, wherein non-Federal public agencies contribute toward the costs of the General Reevaluation Report, was executed on 7 August 1998.

The current non-Federal cost estimate of \$51,210,000 (Oct 92) is an increase of \$30,396,000 over the approved estimate (\$20,814,000 - Oct 74) in the local cooperation agreement. This increase is based on price level adjustments.

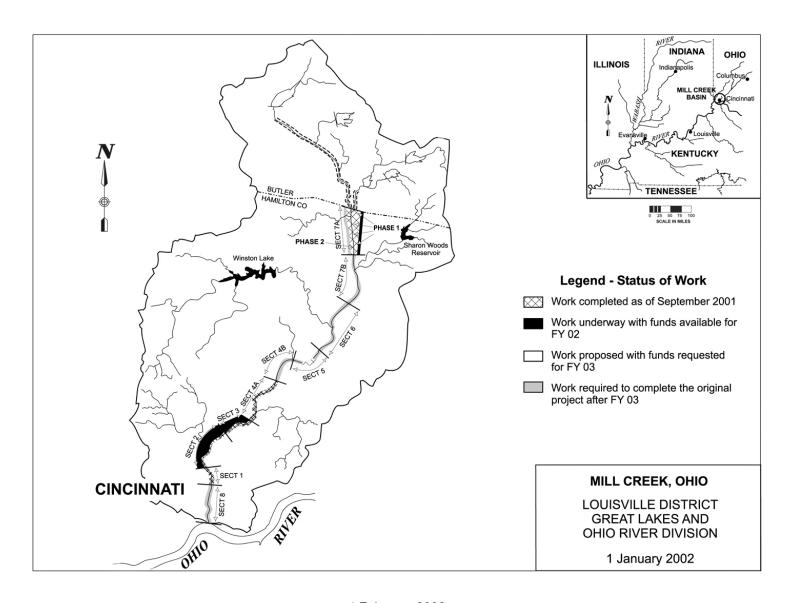
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$163,000,000 is the same as the latest estimate presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement (survey scope) was filed with CEQ on 7 October 1970, and included in the Authorization Report, House Document No. 91-413. The final Environmental Impact Statement was filed with CEQ on 17 October 1974.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1972 and funds to initiate construction were appropriated in FY 1975.

The completion date for the General Reevaluation Report has been revised to June 2004 and the completion date for the Section 3 Punch List Items has been revised to September 2004; from the September 2003 completion date last presented to Congress (FY2000). Scheduled physical completion for the entire project remains indefinite.

Division: Great Lakes & Ohio River District: Louisville Mill Creek, OH



APPROPRIATION TITLE: Construction, General - Local Protection Project (Flood Control)

PROJECT: West Columbus, Ohio (Continuing)

LOCATION: The project is located in Columbus, Ohio, adjacent to the downtown area, in Franklin County.

DESCRIPTION: The proposed project consists of a 7.2 mile levee/floodwall system; 14 gate closures; interior drainage facilities; two new pump stations; and reworking of two existing pump stations. The protected area contains approximately 2,800 acres and is completely urban with a mix of residential, industrial, and commercial development. The project will provide protection from the standard project flood. All work is programmed.

AUTHORIZATION: The Water Resources Development Act of 1988, as amended by the Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 7.0 to 1 at 8 3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 8 3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8 3/4 percent (FY 1993).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Design Refinement Report, dated August 1997.

Division: Great Lakes & Ohio River District: Huntington West Columbus, OH

			ACCUM.		PHYS	
SUMMARIZED FINANCIAL DATA			PCT OF EST FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost		\$ 97,000,000		Entire Project	79	Sep 2004
Estimated Non-Federal Cost Cash Contributions Other Costs  Total Estimated Project Cost	6,893,000 25,507,000	32,400,000 \$129,400,000		PHYSICAL Levee and Floor 7.2 miles of leve Heights range fr Gate Closures: Lands and Dam Pump Stations: Reworking of 2	dwall: ee/floodwall. rom 2 feet to 18 14 (1,100 feet) ages: 198 acres 2 (120,000 & 80	s easement 0,000 GPM)
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002 Allocation Requested for FY 2003 Programmed Balance to Complete after		\$ 77,348,000 11,000,000 12,222,000 89,570,000 2,000,000 5,430,000 0	<u>1</u> / 92 94			

<sup>1/</sup> Reflects \$1,758,000 reduction assigned as savings and slippage, and \$2,980,000 reprogrammed to the project.

Division: Great Lakes & Ohio River District: Huntington West Columbus, OH

JUSTIFICATION: The West Columbus area contains a mix of residential, commercial, and industrial development that is subject to flooding. The maximum flood of record occurred in March, 1913, and the second most severe and the most recent flooding at Columbus occurred in January, 1959. A recurrence of these floods would cause damages of \$417,900,000 and \$316,400,000 respectively. The current value of the property subject to flooding is \$540,000,000.

Average annual benefits for the project total \$23,360,000, all of which are for urban flood damage reduction.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Levee and Floodwall Construction	\$ 1,530,000
Engineering and Design	250,000
Construction Management	220,000

Total \$ 2,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resource Development Act of 1986, the non-federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments during Construction And Reimbursements	Annual Operation, Maintenance, Repair, Replacement, and Rehabilitation
Provide lands, easements, rights of way, and borrow and dredged or excavated material disposal areas.	\$ 5,665,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	19,842,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of recreation facilities.	470,000	

Division: Great Lakes & Ohio River District: Huntington West Columbus, OH

NON-FEDERAL COST: (continued))

Pay approximately 5 percent of the cost allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, replacement and rehabilitation of flood control facilities.

6,423,000 \$185,000

Total Non-Federal Costs \$32,400,000 \$185,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the city of Columbus, Ohio. A Project Cooperation Agreement with the City was executed in July 1993, and was amended in January 1999 to include the downstream realignment area. The City has provided \$6,576,000 of its cash contribution for the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$97,000,000 is unchanged from the latest estimate (\$97,000,000) presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) were signed in November 1986. A revised EA and FONSI were signed in April 1993.

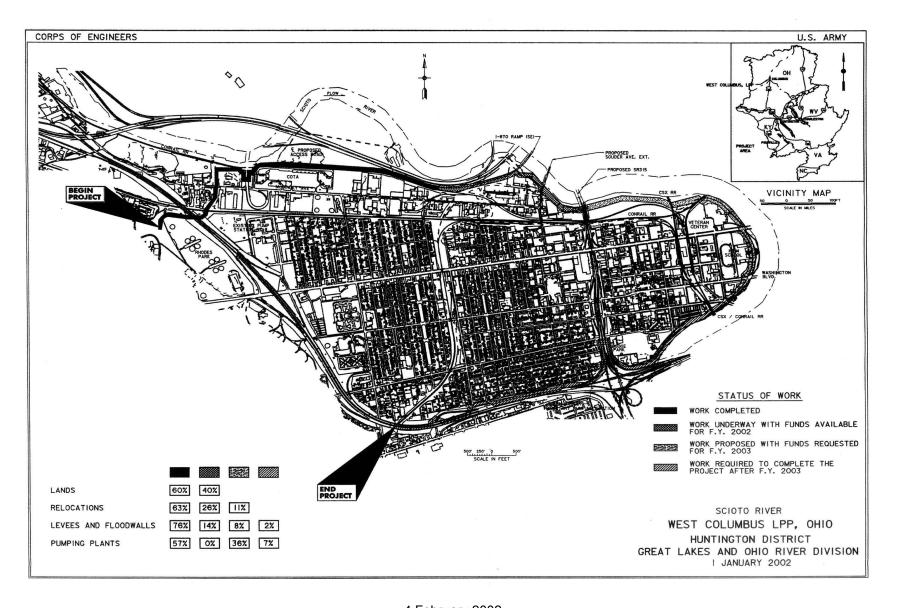
OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1989 and funds to initiate construction were appropriated in FY 1993.

Award of the first construction contract, Dry Run Levee Phase IA, occurred in September 1993. A contract with the Ohio Department of Transportation (ODOT) for the construction by ODOT of gate closures at Souder Avenue and S.R. 315 and for modification of the I-670 embankment was executed on March 3, 1994. ODOT will accomplish this work as part of its ongoing highway construction efforts within the project area. The contract for Phase IB of Dry Run levee was awarded in April, 1995. The contract for Phase IIB Dodge Park pump station was awarded in May 1996. The contract for Phase IIC was awarded in August 1997. The contract for Phase IID was awarded in July 1998. The contract for Phase IIIA (South) was awarded in July 1999. The contract for Phase IIIA (North) was awarded in January 2000. The contract for Phase IIIC was awarded in November 2000. The contract for Phase IIIB was awarded in March 2001. The contract for reliable power was awarded in December 2001.

A new downstream alignment for the project was approved in December 1997 due to engineering necessity.

The scheduled completion date of September 2004 has not changed from the date last presented to Congress (FY 2002).

Division: Great Lakes & Ohio River District: Huntington West Columbus, OH



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Saw Mill Run, Pittsburgh, Pennsylvania (Continuing)

LOCATION: Saw Mill Run is a tributary to and enters the Ohio River from the left descending bank at River Mile 0.7. The project is located at the mouth of Saw Mill Run in the West End area of the city of Pittsburgh, Pennsylvania in Allegheny County.

DESCRIPTION: The proposed Saw Mill Run Local Flood Protection Project extends 4,700 feet from the stream's mouth. The work consists of channel deepening and realignment, channel paving, streambank stabilization, gravity and retaining walls, utility relocations, and the installation of two upstream flood warning gages. All work is programmed.

AUTHORIZATION: Water Resource Development Act of 1986 (Public Law 99-662), as modified by Water Resources Development Act of 1996.

REMAINING BENEFIT - REMAINING COST RATIO: 1.4 to 1 at 7 3/4 percent.

TOTAL BENEFIT - COST RATIO: 1.0 to 1 at 7 3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.45 to 1 at 7 3/4 percent (FY 1997)

BASIS OF BENEFIT - COST RATIO: Benefits are from the Saw Mill Run Flood Protection Project General Reevaluation Report, dated January, 1994, at October, 1993 price levels.

Division: Great Lakes & Ohio River District: Pittsburgh Saw Mill Run, Pittsburgh, PA

SUMMARIZED FINANCIAL DATA		ACCUM. PCT.OF EST FED.COST	.STATUS (1 JAN 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$13,374,000		Entire Project	25	Sep 2003
Programmed Construction \$13,374,000 Unprogrammed Construction			PHYSICA	L DATA	
Estimated Non-Federal Cost	\$ 4,458,000				
Programmed Construction \$4,458,000			Common Excavation	67,0	000 CY
Cash Contributions \$3,328,000			Rock Excavation	780	
Other Costs 1,130,000			Dredging	,	00 CY
Unprogrammed Construction 0			Compacted Fill		00 CY
Cash Contributions \$ 0			Concrete Gravity Wall	590	
Other Costs 0	¢17 022 000		Post and Panel Walls	1 Jc	ac
Total Estimated Programmed Construction	\$17,832,000				
Total Estimated Unprogrammed Construction	0				
Total Estimated Project Cost	\$17,832,000				
Allocations to 30 September 2001	\$ 3,041,000				
Conference Allowance for FY 2002	\$ 4,138,000				
Allocation for FY 2002	\$ 6,230,000 <u>1</u> /				
Allocation through FY 2002	\$ 9,271,000	70			
Allocation requested for FY 2003	\$ 4,103,000	100			
Programmed Balance to Complete after FY 2003	0				
Unprogrammed Balance to Complete after FY 2003	0				

<sup>1/</sup> Reflects a reduction of \$661,000 for savings and slippage and \$2,753,000 reprogrammed to the project.

Division: Great Lakes & Ohio River District: Pittsburgh Saw Mill Run, Pittsburgh, PA

JUSTIFICATION: Saw Mill Run drains an area of 19.4 square miles in Allegheny County, Pennsylvania, with the lower half of the drainage area located within the Pittsburgh city limits. The topography is hilly and the flood plain is narrow, with about 75 percent of the basin in areas of urban development. The proposed project is designed to protect a combination of residential, commercial and light industrial properties, valued at \$13,200,000, from flooding. The maximum flood of record occurred in 1943, at which time flood damages of approximately \$300,000 (1993 value \$6,000,000) were incurred. Low level flooding has occurred regularly in the drainage area during periods of moderate rain. The project will provide protection from the 20 year flood event. The average annual damages are \$94,000 with the project and \$1,103,000 without the project.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Complete Construction	\$ 4,013,000
Complete Planning, Engineering, and Design	15,000
Complete Construction Management	75,000
Total	\$ 4,103,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments during Construction and Reimbursements	Annual Operation, Maintenance, Repair, Replacement, and Rehabilitation Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 860,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	270,000	
Pay approximately 17 percent of the cost allocated to flood control to bring the total non-federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, replacement, and rehabilitation.	3,328,000	83,000
Total Non-Federal Costs	\$ 4,458,000	\$ 83,000

Division: Great Lakes & Ohio River District: Pittsburgh Saw Mill Run, Pittsburgh, PA

# NON-FEDERAL COSTS: (continued)

The non-Federal sponsor will be required to make all payments concurrently with project construction.

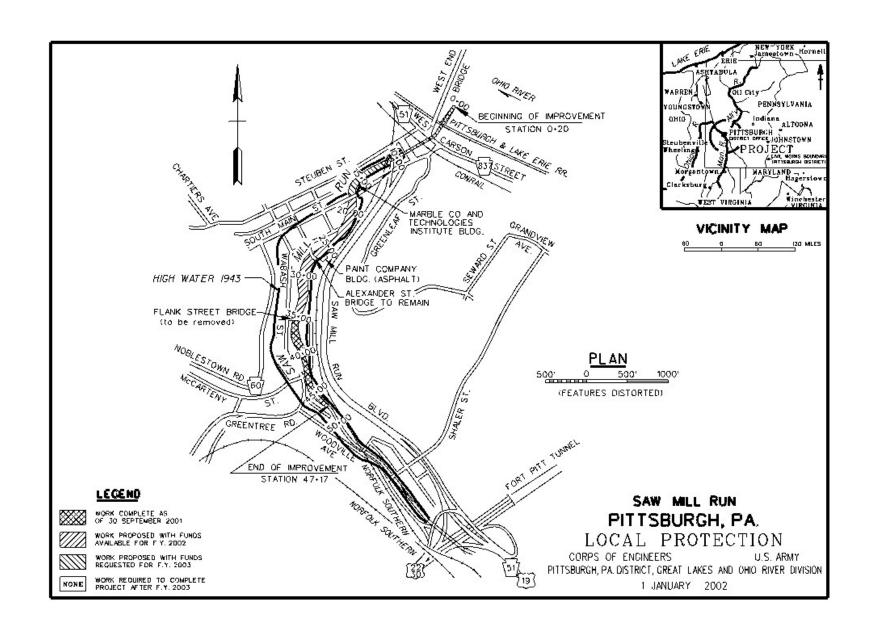
STATUS OF LOCAL COOPERATION: The non-federal cost sharing partner is the city of Pittsburgh, Pennsylvania. By letter dated January 19, 1993, the city expressed its assurance that it would serve as the local sponsor for the project, if funded for construction. The Project Cooperation Agreement was executed in October 1997. Real Estate acquisition, to be done by the Corps for the City of Pittsburgh, was initiated in FY 1998 and completed in FY 2000. The construction contract was awarded in April 2001.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$13,374,00 remains unchanged from the last estimate presented to Congress. (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was completed during the reevaluation study, and a signed Finding of No Significant Impacts (FONSI) was included in the General Reevaluation Report, dated January, 1994.

OTHER INFORMATION: The scheduled completion date of September 2003 is the same as last presented to Congress (FY2002).

Division: Great Lakes & Ohio River District: Pittsburgh Saw Mill Run, Pittsburgh, PA



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, West Virginia, Virginia and Kentucky (Continuing)

LOCATION: The Levisa and Tug Forks are situated in southwestern West Virginia, southeastern Kentucky, and western Virginia and converge at Fort Gay, West Virginia, and Louisa, Kentucky, to form the Big Sandy River. The Levisa Fork Basin encompasses 2,326 square miles. The project area includes the mainstem Levisa Fork from Louisa, Kentucky, to Grundy, Virginia (approximately 100 stream miles excluding Fishtrap Lake), and the mainstem Russell Fork from its confluence with the Levisa Fork, to and including Haysi, Virginia (approximately 31 stream miles). Projects are located in Pike County, Floyd County, Johnson County, and Lawrence County in Kentucky and Buchanan County, Dickenson County in Virginia. The Tug Fork Basin encompasses 1,555 square miles. The project area is comprised of approximately 140 stream miles from Louisa, Kentucky to Welch, West Virginia. Projects are located in Pike County, and Martin County in Kentucky, and Wayne County, Mingo County and McDowell County in West Virginia. The Upper Cumberland River Basin encompasses 1,977 square miles. Approximately 132 stream miles of the Cumberland River from its origin at Harlan, Kentucky, to Cumberland Falls are included in the project area. Projects are located in Harlan County, Knox County, Bell County, and Whitely County in Kentucky.

DESCRIPTION: The project includes levees, floodwalls, pump stations, and a flood control reservoir; the floodproofing and evacuation of structures located in the flood hazard areas; and development of relocation sites for the affected areas. Work is complete at Williamson, West Virginia; Barbourville, Kentucky; South Williamson, Kentucky; and Pineville, Kentucky. Work at Matewan, West Virginia, Hatfield Bottom area of Matewan, West Virginia, Wayne County, West Virginia, McDowell County, West Virginia, Upper and Lower Mingo County, West Virginia, Harlan, Kentucky, Williamsburg, Kentucky, Pike County (Tug Fork), Kentucky, Martin County, Kentucky, Middlesborough, Kentucky, Clover Fork, Kentucky, Town of Martin, Kentucky, and Grundy, Virginia are under way with available funds. Detailed Project Reports for Pike County (Tug Fork) Tributaries supplement, Kentucky, Buchanan County, Virginia, Dickenson County, Virginia, Levisa Fork and Upper Cumberland River Basins are under way with available funds. Flood warning systems for the Tug and Levisa basins are under way with available funds. The Grundy, Virginia, non-structural project and the Harlan County, Kentucky, Detailed Project Report are programmed. All other work is unprogrammed. (See status and completion schedule).

AUTHORIZATION: The Energy and Water Development Appropriations Act, 1981, and Water Resources Development Act of 1986.

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River
and Upper Cumberland River, WV, VA and KY

REMAINING BENEFIT-REMAINING COST RATIO: Not Applicable. 1/

TOTAL BENEFIT-COST RATIO: Not Applicable. 1/

INITIAL BENEFIT-COST RATIO: Not Applicable. 1/

BASIS OF BENEFIT-COST RATIO: Not Applicable. 1/

1/ An overall project benefit-cost ratio was not computed because the Congress, in the Energy and Water Development Appropriations Act, 1981, found that the benefits attributable to the flood control measures authorized by the Act exceed their costs.

### SUMMARIZED FINANCIAL DATA

Estimated Federal Cost Programmed Construction Unprogrammed Construction		\$ 839,415,000 1,104,317,000	\$1,943,732,000 <u>2</u> /
Estimated Non-Federal Cost			112,540,000 <u>3</u> /
Programmed Construction		41,091,000	
Cash Contributions	\$ 10,191,000		
Other Costs	30,900,000		
Unprogrammed Construction		71,449,000	
Cash Contributions	71,449,000		
Other Costs	0		

Division: Great Lakes & Ohio River District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY

# SUMMARIZED FINANCIAL DATA (Continued)

ACCUM. PCT. OF EST FED. COST

Total Estimated Programmed Construction Cost Total Estimated Unprogrammed Construction Cost	880,506,000 1,175,766,000		
Total Estimated Project Cost	1,110,100,000	2,056,272,000	
Allocations to 30 September 2001		\$ 755,952,000 <u>2</u>	2/
Budget Request for FY 2002		16,700,000	
Conference Allowance for FY 2002 41,100,0		41,100,000	
Allocation for FY 2002		40,893,000 <u>4</u>	<u> </u> /
Allocations through FY 2002		796,845,000	41
Allocation Requested for FY 2003		10,400,000	42
Programmed Balance to Complete after FY 2003		32,170,000	
Unprogrammed Balance to Complete after FY 2003		1,104,317,000	

<sup>2/</sup> Includes payment of \$850,000 from the Department of Treasury Judgment Fund for a claim at Matewan, WV.

Division: Great Lakes & Ohio River District: Huntington / Nashville Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY

<sup>3/</sup> Does not include the following non-Federal contributions, which are not part of the authorized project cost: Pineville, KY -- \$17,691,000 in costs allocated to the highway portion of an integrated highway/floodwall element constructed in cooperation with the Commonwealth of Kentucky for Pineville & Wallsend, Kentucky. 4/ Reflects \$3,157,000 reduction assigned as savings and slippage, and \$2,950,000 reprogrammed to the Grundy project to restore savings and slippage.

STATUS (1 Jan 2002)		COMPLETION ESCHEDULE	STATUS (1 Jan 2002)	PERCEN COMPLE	
Structural Measures			Levisa Fork Basin DPRs (Continued)		
Pineville, KY	100		Johnson Co., Ky	0	Indefinite
Williamson Area, WV	100		Dickenson Co., VA	70	Sep 2002
South Williamson, KY	100		Lawrence Co. (Levisa), KY	0	Indefinite
Barbourville, KY (Cutoff)	100				
Barbourville, KY Levee/Fldwll	100		Tug Fork Basin DPRs:		
Matewan, WV	99	Sep 2002	Matewan, WV	100	
Harlan, KY	99	Indefinite	South Williamson, KY	100	
Williamsburg, KY	100		Lower Mingo Co., WV	100	
Middlesborough, KY	98	Indefinite	Upper Mingo Co., WV	100	
Haysi Dam, VA	0	Indefinite	Pike Co. (Tug Fork), KY	100	
			Tug Fork GDM	100	
Levisa Basin Flood Warning System	100		Matewan, Hatfield Bottom, WV	100	
Tug Basin Flood Warning System	100		Martin Co., KY	100	
			Wayne Co., WV	100	
Detailed Project Reports			McDowell Co., WV	100	
Upper Cumberland Basin:			Lower Mingo Co., WV, Tribs	100	
Harlan, KY	100		Pike Co., KY, Supplement	95	Jul 2002
Williamsburg, KY	100		Lawrence Co. (Tug Fork), KY	0	Indefinite
Middlesborough, KY	100				
Upper Cumberland River Basin	100		Nonstructural Measures		
Clover Fork, KY	100		Williamson, WV	100	
City of Cumberland, KY	75	Indefinite	Matewan, WV	100	
Harlan Co., KY	95	Oct 2002	Pineville, KY	100	
Bell Co., KY	20	Indefinite	South Williamson, KY	100	
Knox Co., KY	0	Indefinite	Barbourville, KY	100	
Whitley Co., KY	0	Indefinite	Matewan, Hatfield Bottom, WV	99	Indefinite
Levisa Fork Basin DPRs:			Williamsburg, KY	95	Indefinite
Grundy, VA	100		Harlan, KY	98	Indefinite
Levisa Basin/Haysi Dam GPS	100		Lower Mingo Co., WV	90	Indefinite
Buchanan Co., VA	98	Feb 2002	Pike County, KY (Tug Fork)	95	Indefinite
Town of Martin, KY	100		Middlesborough, KY	98	Indefinite
Pike Co. (Levisa Fork), KY	27	Sep 2003	Upper Mingo County, WV	90	Indefinite
Floyd Co. Ky	0	Indefinite	Levisa Basin, VA & KY	0	Indefinite

Division: Great Lakes & Ohio River District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY

STATUS (1 Jan 2002)	PERCENT COMPLETE	COMPLETION SCHEDULE
Nonstructural Measures (continued):		
Grundy, VA	20	Sep 2005
Martin County, KY	50	Mar 2005
Wayne County, WV	80	Indefinite
McDowell County, WV	10	Indefinite
Clover Fork, KY	1	Indefinite
Town of Martin	1	Sep 2011

PHYSICAL DATA					
WILLIAMSON AREA Williamson CBD	Floodwall: Height - 22 ft. avg. Length - 3,900 ft. Pump Stations 2 ea. 30,000 and 70,000 GPM	Lands and Damages: Acres: 18.24 fee 5.76 easement Type – Urban	Relocations: Railroad, highways, city and public utilities		
WILLIAMSON AREA West Williamson	Floodwall: Height - 17 ft. avg. Length - 6,237 ft. Pump stations: 1 ea. @ 40,000 GPM	Lands and Damages: Acres: 25.72 fee 31.03 easement Type – Urban	Relocations: Railroad, highways, city and public utilities		
WILLIAMSON AREA Snagging and Clearing	N/A	Lands and Damages: Acres: 86.62 easement Type – Riverbank	N/A		

Division: Great Lakes & Ohio River District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY

	PHYSICAL DATA (continued)				
MATEWAN	Floodwall/fill: Height - 13 ft. avg. Length - 2,500 ft. Pump stations: 1 ea. @ 18,000 GPM	Lands and Damages: Acres: 45.41 fee 48.88 easement	Relocations: Highway 49 and bridge, Route 9, fire station, town hall and utilities		
SOUTH WILLIAMSON	Floodwall: Height - 21 ft. avg. Length - 2,700 ft. Pump Stations: 1 ea. @ 12,000 GPM	Lands and Damages: Acres: 21.52 fee 5.46 easement Type – Residential	Relocations: School cafeteria, highways, county and public utilities		
PINEVILLE	Floodwall/Levee/Highway Height - 25 ft. avg. Length - 7,800 ft. Wallsend Levee Height - 25 ft. avg. Length - 4,300 ft.	Lands and Damages: Acres: 118 Type – Urban	Relocations: Wallsend Bridge, Pine Street Bridge		
BARBOURVILLE Cutoff	High Flow Diversion Width - 150 ft. Depth - 40 ft. max. Length - 5,000 ft.	Lands and Damages: Acres: 96 Type – Agricultural	Relocations: Tye Bend Rd Bridge		
BARBOURVILLE Levee/Floodwall	Levee/Floodwall Height - 26 ft. avg. Length - 19,536 ft.	Lands and Damages: Acres: 144 Type – Urban	Relocations: Highway 459 Bridge		

Division: Great Lakes & Ohio River District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY

PHYSICAL DATA (continued)					
HARLAN (Phase I) Harlan Tunnels	Diversion Tunnels Length - 4 ea @ 2000 ft.	Lands and Damages: Acres: 12 Type – Urban	Relocations: KY Hwy 38 Bridge KY Hwy 72 Bridge		
HARLAN (Phase II) Harlan Floodwall	Floodwall/Levee Length - 4,875 ft Height - 24 ft	Lands and Damages: Acres: 16 Type – Urban	Relocations: KY Hwy 11		
HARLAN (Phase III) Loyall/Rio Vista Diversion/Levee/Floodwall	Diversion Width - 120 ft channel Depth - 300 ft. max. Length - 3,800 ft. Levee/Floodwall Height - 24 ft. Length - 8,600 ft.	Lands and Damages: Acres: 225 Type – Urban	Relocations: KY Hwy 840 Bridge Park Drive Bridge Highway 413 CSX Railway		
WILLIAMSBURG	Levee/Floodwall Height - 15 ft. avg. Length - 4,800 ft.	Lands and Damages: Acres: 23 Type – Urban	Relocations: Public utilities		
MIDDLESBOROUGH	Channel Length - 5.2 mi.	Lands and Damages: Acres: 132	Relocations: Public utilities		

Division: Great Lakes & Ohio River District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY

	PHYSICAL DA	ATA (continued)		
HAYSI DAM	Concrete Arch Dam: Height - 202 ft. Length - 825 ft. Spillway: Type - Ogee Weir Length - 170 ft. Discharge - 151,000 cfs Reservoir: Flood Control 28,400 ac.ft. Conservation 8,870 ac.ft. Total 37,270 ac.ft.	Lands and Damages:     Acres: 8,335 fee     Type - Rural residential and     subsistence farms Improvements- Predominantly farm     buildings/residential	Relocations: Virginia Secondary Hwy. 609 Public utilities	
NON STRUCTURAL		ood prone areas and floodproofing of unproermined during preparation of project repo		
DETAILED PROJECT REPORTS	Detailed project reports that currently a or completed.	are under way for other locations in the au	nthorized project area will be continued	

Division: Great Lakes & Ohio River District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY

JUSTIFICATION: Tug Fork - Historically, repeated flooding in the Tug Fork Valley has brought extensive damage to homes and other developments. During the past 38 years, major floods occurred in January, 1957, March, 1963, March, 1967, April, 1977, and May, 1984. The 1977 flood was the flood of record along much of the Tug Fork. This devastating flood caused valley-wide damages approaching \$200 million at 1977 price levels. Six hundred homes were totally destroyed and 4,700 homes were flooded. Physical losses from direct damage to non-residential buildings and contents exceeded \$41 million. Over half of all damages occurred in Mingo County, West Virginia. Pike County, Kentucky had about \$45 million in damages. The May, 1984 flood resulted in an estimated \$117 million in damages along the Tug Fork. As in previous floods, the extensive bituminous coal mining industry of the basin was disrupted due to direct damage, interrupted transportation, and lost time because of diversions of the work force to flood fighting and cleanup.

Levisa Fork - The same repeated flooding characteristic of the Tug Fork has plagued the Levisa Fork area. During the April, 1977 flood, damages amounted to approximately \$93 million at 1977 price levels. The May, 1984 flood caused an additional \$90 million in losses along the mainstem of the Levisa Fork and its primary upstream tributary, Russell Fork. Impacts on residential properties, commercial and transportation facilities, and the mining industry were similar to those described in the Tug Fork areas.

Upper Cumberland - Flooding continues to bring recurring damage to the Upper Cumberland area. Total damages in all categories amounted to \$34.7 million for this area during the April, 1977 event. The Pineville element protects about 185 acres of urban land containing structures valued at \$25.7 million. At Barbourville, the existing project was sandbagged during the April, 1977 flood event, preventing major losses to some 700 acres of urban land containing structures valued at \$52.4 million. The currently unprotected area is a mix of agriculture and urban land and contains structures valued at over \$6.0 million. During the 1977 flood, no area of Harlan County escaped damage, and four persons drowned and approximately 1,800 persons were left homeless. Total flood damage and associated costs came to almost \$31 million.

The following counties qualify as areas of "substantial and persistent" unemployment: West Virginia - Mingo, McDowell, Wayne; Kentucky - Martin, Pike, Lawrence, Floyd, Johnson, Bell, Harlan, Knox, Whitley; Virginia – Buchanan, Dickenson.

Division: Great Lakes & Ohio River District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY

FISCAL YEAR 2003: The requested amount will be applied as follows:

#### Non Structural Measures

Grundy, Virginia

Continue Land Acquisition	\$ 3,000,000
Continue Relocations	750,000
Engineering and Design	900,000
Construction Management	5,100,000
Voluntary Floodproofing & Acquisition	650,000

Total \$ 10,400,000

PROJECT COSTS: Project elements under construction on 30 April 1986 are exempted from construction cost sharing in accordance with the Water Resources Development Act of 1986. These elements are Williamson Area, West Virginia; South Williamson, Kentucky; Matewan, West Virginia; and Pineville, Kentucky. The Harlan and Barbourville elements were exempted from construction cost sharing by Title I, Section 103 of Water Resources Development Act of 1986. The Hatfield Bottom area of Matewan, West Virginia, was included in the Matewan, West Virginia, element area by the Energy and Water Development Appropriations Act, 1991, Public Law 101-514, and as such, is exempt from cost sharing.

Construction cost sharing is required for all other elements in accordance with the Water Resources Development Act of 1986. The sponsor of each project element for which construction is initiated after 30 April 1986 must provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas; modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the element; pay a cash contribution of no less than 5 percent of the costs allocated to structural flood control to bring the total non-Federal share of structural flood control costs to 25 percent; and bear 25 percent of non-structural flood control costs, including the value of real estate interests and relocations contributed by the sponsor. In accordance with Section 103(m) of the Act, these requirements are subject to the ability of the non-Federal sponsor to pay.

In accordance with Section 202, Energy and Water Development Appropriations Act, 1981 and Public Law 99-662, non-Federal interests must bear all costs of operation, maintenance, and replacement of completed facilities.

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River
and Upper Cumberland River, WV, VA and KY

FEDERAL COSTS:	Payments During Construction	Payments During Construction	Annual Operation,
B : 45	and Reimbursements	and Reimbursements	Maintenance, and
<u>Project Element</u> Williamson Area, WV	(Funded/Programmed Work)	(Unprogrammed Work)	Replacement Costs
Williamson Area, WV NS	\$105,734,000 24,004,000	\$ 0 0	\$ 0 0
Matewan, WV	57,398,000	0	0
Matewan, WV NS	10,129,000	0	0
Hatfld Bottom, Matewan, WV	8,300,000	0	0
South Williamson, KY	25,873,000	0	0
South Williamson, KY NS	28,233,000	0	0
Pineville, KY 48,406,000	20,233,000	0	0
Pineville, KY NS	4,011,000	10	0
Barbourville, KY	32,019,000	100	0
Barbourville, KY NS	4,191,000	200	0
Harlan, KY	159,286,000	1,014,000	0
Harlan, KY NS	17,154,000	4,146,000	0
Grundy, VA NS	74,100,000	4, 140,000 0	0
Lower Mingo County, WV NS	44,297,000	803,000	0
Williamsburg, KY	18,634,000	1,696,000	0
Williamsburg, KY NS	1,663,000	47,000	0
Pike County, KY NS	28,178,000	1,022,000	0
Upper Mingo County, WV NS	13,093,000	1,682,000	0
Middlesborough, KY	31,055,000	875,000	0
Middlesborough, KY NS	1,234,000	371,000	0
Clover Fork, KY NS	12,621,000	19,489,000	0
City of Cumberland	4,700,000	23,800,000	0
Martin County, KY NS	18,810,000	19,290,000	0
Wayne County, WV NS	6,032,000	4,365,000	0
Haysi Dam, VA & KY	82,000	129,288,000	0
Levisa Basin, VA & KY NS	02,000	612,099,000	0
McDowell County, WV NS	14,326,000	164,844,000	0
Levisa Fk Flood Warning Syst	400,000	104,044,000	0
Tug Fk Flood Warning Syst	400,000	0	0
Town of Martin, KY NS	1,858,000	88,284,000	0
Other costs 1/	43,194,000	31,201,690	0
Total Federal Cost <u>1</u> /	\$ 839,415,000	\$ 1,104,317,000	<u> </u>
		led in project costs upon report approval.	ΨΟ
<u>11</u> 1 10 WNDA 00 00313 pius 00313 101 u	mappioved reports, without will be includ	ica in project costs apon report approval.	

Division: Great Lakes & Ohio River

Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY

District: Huntington / Nashville

and Reimbursements and Reimbursements Maintenance, a  Project Element (Funded/Programmed Work) (Unprogrammed Work) Replacement Co	<u>osts</u>
Williamson Aroa W//	00 0
Williamson Area, WV \$ 0 \$71,00	0
Williamson Area, WV NS 0 0	-
Matewan, WV 76,000 0 30,00	00
Matewan, WV NS 0 0	0
Hatfld Bottom, Matewan, WV 0 0	0
South Williamson, KY 0 0 8,00	00
South Williamson, KY NS 0 0	0
Pineville, KY 0 0 20,00	00
Pineville, KY NS 0 0	0
Barbourville, KY 0 0 20,00	00
Barbourville, KY NS 0 0	0
Harlan, KY 0 0	0
Harlan, KY NS 0 0 20,00	00
Grundy, VA NS 30,900,000 0 21,50	00
Lower Mingo County, WV NS 2,320,000 53,000	0
Williamsburg, KY 985,000 85,000 20,00	00
Williamsburg, KY NS 88,000 2,000	0
Pike County, KY NS 1,486,000 54,000	0
Upper Mingo County, WV NS 689,000 88,000	0
Middlesborough, KY 1,635,000 45,000 27,00	00
Middlesborough, KY NS 68,000 17,000	0
Clover Fork, KY NS 664,000 1,026,000	0
City of Cumberland 0 1,500,000	0
Martin County, KY NS 980,000 1,020,000	0
Wayne County, WV NS 318,000 228,000	0
Haysi Dam, VA & KY 0 12,198,000 486,40	00
Levisa Basin, VA & KY NS 0 41,584,000	0
McDowell County, WV NS 702,000 8,728,000	0
Levisa Fk Flood Warning Syst 21,000 0	0
Tug Fk Flood Warning Syst 21,000 0	0
Town of Martin, KY NS 113,000 4,631,000	0
Other costs <u>25,000</u> <u>190,000</u>	0
Total Non-Federal Cost \$ 41,091,000 \$71,449,000 \$723,90	00

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY

#### STATUS OF LOCAL COOPERATION:

The City of Barbourville, Kentucky signed a Section 221 Agreement for the Barbourville element on February 14, 1984, to become project sponsor for operation and maintenance after construction is complete.

The City of Pineville, Kentucky signed a Section 221 Agreement for the Pineville element on February 19, 1983, to become project sponsor for operation and maintenance. The Corps and the Commonwealth of Kentucky executed a cost-sharing arrangement for construction of the four-lane highway portion of the project.

The County of Harlan, Kentucky signed a Section 221 Agreement on October 20, 1988, to become project sponsor for operation and maintenance after construction is complete.

Mingo County, West Virginia, signed a Section 221 Agreement on March 2, 1983, agreeing to operate and maintain features of the project within its jurisdiction. The City of Williamson, Town of Matewan and Mingo County entered into a sub-agreement transferring certain responsibilities to the City.

Pike County, Kentucky, signed a Section 221 Agreement on August 1, 1983, agreeing to act as non-Federal sponsor for features of the project within its jurisdiction.

A Project Cooperation Agreement for the Lower Mingo County, West Virginia, element was executed on November 17, 1992, with the Mingo County Commission.

A Project Cooperation Agreement for the Williamsburg, Kentucky element was executed on March 10, 1995, with the City of Williamsburg, Kentucky.

A Project Cooperation Agreement for the Pike County, Kentucky element was executed on October 14, 1994, with the Pike County Kentucky Fiscal Court.

A Project Cooperation Agreement for the Upper Mingo County, West Virginia element was executed on December 20, 1995, with the Mingo County, West Virginia Commission.

A Project Cooperation Agreement for the Middlesborough, Kentucky element was executed on January 18, 1996 with the City of Middlesborough, Kentucky.

A Project Cooperation Agreement for the Martin County, Kentucky element was executed on April 21, 1997 with the Martin County Fiscal Court.

A Project Cooperation Agreement for the Wayne County, West Virginia element was executed in April 1998 with the Wayne County Commission.

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River
and Upper Cumberland River, WV, VA and KY

#### STATUS OF LOCAL COOPERATION (cont.):

A Project Cooperation Agreement for the Grundy, Virginia nonstructural element was executed in August 1998 with the Town of Grundy, Virginia and the Virginia Department of Transportation (VDOT).

A Supplement to the Project Cooperation Agreement to add the Mingo County Tributaries to the Upper Mingo County West Virginia element was executed in June 1999 with the Mingo County Commission.

A Project Cooperation Agreement for the McDowell County, West Virginia element was executed in September 1999 with the McDowell County Commission.

A Project Cooperation Agreement Amendment #1 for McDowell County, West Virginia element was executed in December 2001 with the McDowell County Commission.

A Project Cooperation Agreement for the Clover Fork, Kentucky element was executed on April 13, 2000 with Harlan County, Kentucky.

A Project Cooperation Agreement for the Town of Martin, Kentucky element was executed in June 2001 with the Floyd County Fiscal Court.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$1,943,732,000 is an increase of \$11,595,000 from the latest estimate (\$1,932,137,000) presented to Congress (FY 2002). This change includes the following items.

Item	Amount
Price Escalation on Study Costs in the Levisa Basin Post Contract Award and Other Estimating Adjustments	\$ 5,806,000 2,185,000
(including contingency adjustments for Middleborough project) Price Escalation on Real Estate	3,604,000
Total	\$11,595,000

Division: Great Lakes & Ohio River

District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River
and Upper Cumberland River, WV, VA and KY

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Tug Fork - The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (EPA) on December 3, 1982.

Pineville - The final EIS was filed with EPA on December 22, 1982.

Barbourville - The Finding of No Significant Impact (FONSI) was signed on February 1, 1984.

Harlan - The final EIS was filed with EPA on April 22, 1988. The Record of Decision was signed on August 8, 1988.

Williamsburg - The FONSI was signed on May 19, 1994.

Middlesborough - The FONSI was signed on June 9, 1995.

Town of Martin – The FONSI was signed on August 8, 2000.

Detailed Project Reports - EIS's for other areas will be scheduled as studies proceed.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1981. The Urgent Supplemental Appropriations Act, 1984 (Public Law 98-332) provided \$21,000,000 for nonstructural measures at this project.

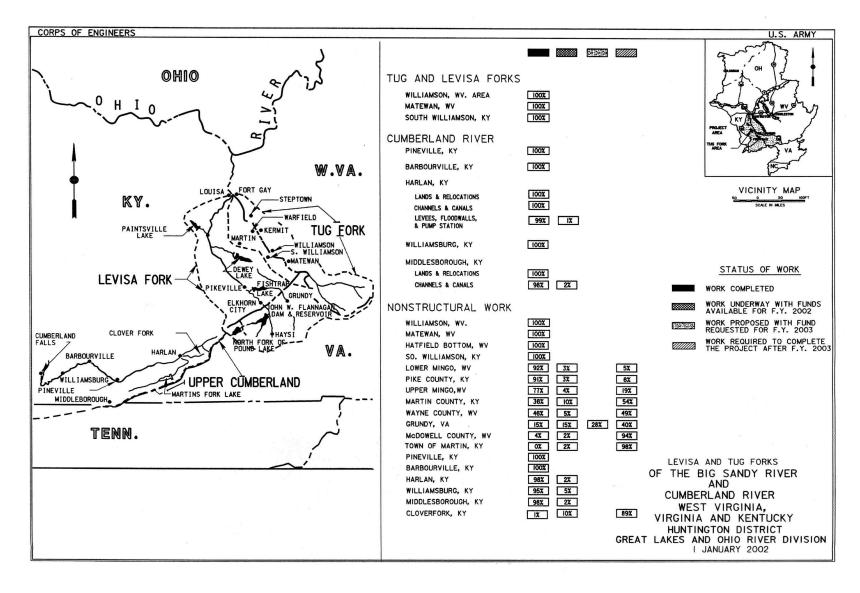
The scheduled completion date of September 2002 for programmed work at Matewan, WV slipped from the latest completion date of September 2001 presented to Congress. This delay is due to additional time required for completion of property transfers.

The scheduled completion date for the Grundy, VA project is September 2005, the same as last presented to Congress.

The scheduled completion date for the Martin County, KY nonstructural project has been changed from indefinite (FY2002) to March 2005.

Division: Great Lakes & Ohio River District: Huntington / Nashville

Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA and KY



APPROPRIATION TITLE: Construction, General – Major Rehabilitation (Flood Control)

PROJECT: Mississinewa Lake, Indiana (Major Rehabilitation) (Continuing)

LOCATION: The project is located on the Mississinewa River, a tributary of the Wabash River, in Wabash, Miami, and Grant Counties in north central Indiana. The lake is located approximately 65 air miles north of Indianapolis, Indiana.

DESCRIPTION: The project will provide for increased stability of the dam by constructing a concrete cut-off wall in 2,600 feet of embankment to a depth ranging from 150 to 180 feet penetrating 5 feet into the rock foundation. The cut-off wall will prevent further loss of the embankment or overburden foundation materials into the untreated rock foundation and restore the project to full operational capability. The existing reservoir was constructed to reduce flood damages downstream of the project within the upper Wabash River Basin, and was placed in operation in October 1967. The dam is earth fill and is 8,000 feet long and 140 feet high. The top elevation of the dam is 797 feet msl. Maximum flood control storage capacity is 368,400 acre-feet.

AUTHORIZATION: Flood Control Act of 1958.

REMAINING BENEFIT-COST RATIO: 2 to 1 at 6 7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 6 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.9 to 1 at 6 7/8 percent (FY 2001).

BASIS OF BENEFIT-COST RATIO: Mississinewa Dam Major Rehabilitation Report, dated May 2000 with July update.

Division: Great Lakes & Ohio River

District: Louisville

Mississnewa Lake, IN

(Major Rehabilition)

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLET	
Estimated Federal Cost	\$ 40,000,000		Entire Project	5	Sep 2005
Estimated Non-Federal Cost Cash Contribution Other Costs	0 0 0		Dam: Len Drainage	-	L DATA Height - 140 ft 809 sq mi
Total Estimated Project Cost	\$ 40,000,000		Flood Poo Winter Po Summer F	ol	779 ft. (12,830 acres) 712 ft. (1,280 acres) 737 ft. (3,180 acres)
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002	\$ 312,000 9,000,000 8,362,000 8,674,000	1/ 22			
Allocation Requested for FY 2003 Programmed Balance to Complete after FY 2003 Unprogrammed Balance to Complete after FY 2003	7,094,000 24,232,000 \$ 0	39 100			

<sup>1/</sup> Reflects \$1,438,000 reduction assigned as savings and slippage and \$800,000 reprogrammed to the project.

Division: Great Lakes & Ohio River

District: Louisville

Mississnewa Lake, IN
(Major Rehabilition)

JUSTIFICATION: The Mississinewa Lake Project was completed in October 1967. During the latter stages of construction in late 1966, a boil was discovered at the toe of the dam. Remedial actions were taken and the boil area was stabilized. Lateral drains were installed and the seepage was thought to be eliminated. In April 1988, settlement of roadway guardrail and the road across the top of the dam first appeared. A monitoring program was effected and has continued to the present. Recent subsurface investigations have revealed a 0.8-foot settlement of a portion of the dam. In May 1999, monitoring wells on the dam revealed that downward stresses are actively compressing the embankment in the area of the settlement and threatening the integrity of the structure. The dam itself remains stable at this time, however, the settlement is continuing which may lead to fissures and possible dam failure. The project includes the placement of a 2,600-foot concrete cut-off wall along the full right embankment. It will extend to depths ranging from 150 to 180 feet, penetrating 5 feet into the rock foundation.

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control Recreation	\$ 7,156,000 1,066,000
Total	\$ 8,222,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Construction Contract	\$ 6,564,000
Planning, Engineering, and Design	40,000
Construction Management	490,000
Total	\$ 7,094,000

NON-FEDERAL COSTS: None required.

STATUS OF LOCAL COOPERATION: None

Division: Great Lakes & Ohio River

District: Louisville

Mississnewa Lake, IN

(Major Rehabilition)

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$40,000,000 is a decrease of \$6,619,000 from the latest estimate (\$46,619,000) presented to Congress (FY 2002). This change includes the following item.

Item Amount

Post Contract Award and Other Estimating Adjustments \$ -6,619,000

Total \$ -6,619,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The proposed action consists of a repair to a existing operating project. An Environmental Assessment has been completed and a Finding of No Significant Impact was signed by the District Engineer 14 Mar 2000. An Environmental Impact statement is not required.

OTHER INFORMATION: Funds to initiate construction were provided in FY 2001. The Mississinewa Lake Dam Safety/Major Rehabilitation Report was approved by ASA (CW) 5 January 2001.

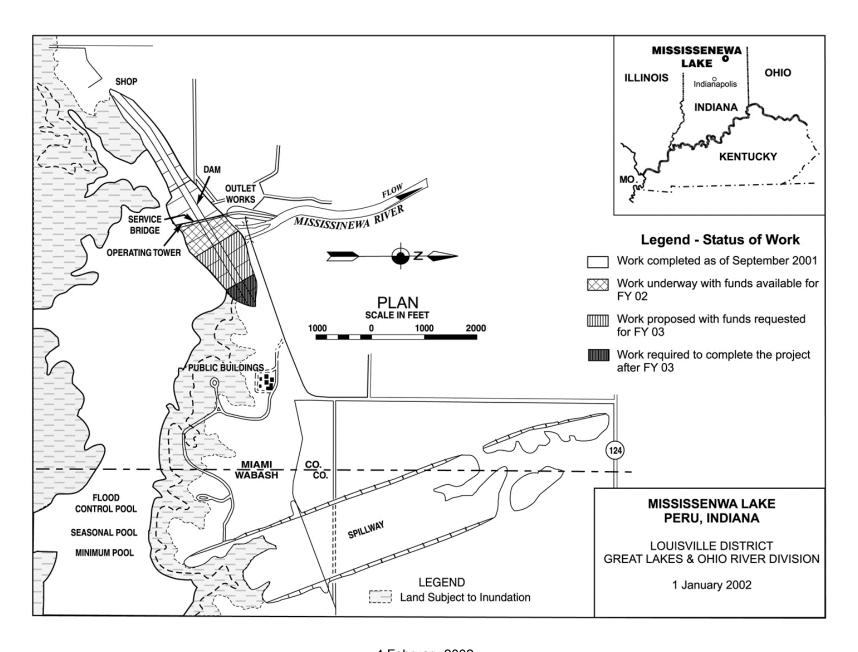
The scheduled completion date of September 2005 is the same as last presented to Congress (FY2002).

Division: Great Lakes & Ohio River

District: Louisville

Mississnewa Lake, IN

(Major Rehabilition)



APPROPRIATION TITLE: Construction, General - Dam Safety Assurance (Flood Control)

PROJECT: Dewey Lake, Kentucky (Dam Safety Assurance) (Continuing)

LOCATION: The project is located in Floyd County, Kentucky, on Johns Creek of Levisa Fork, a tributary of the Big Sandy River, 79.4 miles above the mouth of the Big Sandy River.

DESCRIPTION: The dam safety assurance project for Dewey Lake involves raising the effective height of the dam with a 3-foot high concrete parapet wall, and raising the main dike with compacted earth; adding a 125-foot wide auxiliary spillway; and restricting the existing spillway to its original design capacity by providing vertical restriction walls on each side. The existing project was completed in 1949. All work is programmed.

AUTHORIZATION: Flood Control Act of 1938.

REMAINING BENEFIT-REMAINING COST RATIO: Not Applicable.

TOTAL BENEFIT-COST RATIO: Not Applicable.

INITIAL BENEFIT-COST RATIO: Not Applicable.

BASIS OF BENEFIT-COST RATIO: Not Applicable.

SUMMARIZED FINANCIAL DATA

Original Project

Actual Federal Cost \$7,845,547

Actual Non-Federal Cost 0

Total Actual Original Project Cost \$7,845,547

Division: Great Lakes & Ohio River District: Huntington

Dewey Lake, KY (Dam Safety Assurance)

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Project Modification			Project Modification	80	Sep 2004
Estimated Federal Cost	\$18,600,000		F	PHYSICAL DATA	
Estimated Non-Federal Cost	0			•	eg Dike) approximately
Total Estimated Modification Cost	\$18,600,000		three feet with compacted earth; add an spillway with a crest elevation of 688.0; vertical restriction walls on the existing s		of 688.0; provide
Total Estimated Project Cost	\$ 26,445,547		to restrict dis		capacity; and add
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002	\$ 13,704,000 4,500,000 1,781,000 15,485,000	<u>1</u> /	o loot parapo	or wall dolooo dal	
Allocation Requested for FY 2003 Programmed Balance to Complete after FY 2003 Unprogrammed Balance to Complete after FY 2003	600,000 2,515,000 0				

<sup>1/</sup> Reflects \$719,000 reduction assigned as savings and slippage, and \$2,000,000 reprogrammed from the project.

JUSTIFICATION: According to current engineering criteria, spillway capacities at Dewey Lake are inadequate. The ability of the dam to resist failure when overtopped is of particular concern. Hydrology and hydraulic studies show that failure of the 118-foot high Dewey Lake Dam could result in a major catastrophe. The project is constructed of rolled earth fill with a central impervious core and has a maximum crest length of 913 feet. According to current engineering studies, the dam could only contain 61 percent of the probable maximum flood, the largest flood that could be reasonable expected. Such a situation leads to an extremely high risk of dam failure.

Division: Great Lakes & Ohio River District: Huntington Dewey Lake, KY (Dam Safety Assurance)

FISCAL YEAR 2003: The requested funds will be applied as follows:

Continue Dam Safety Construction Planning, Engineering and Design Construction Management	\$ 470,000 100,000 30,000
Total	\$ 600,000

NON-FEDERAL COSTS: None. The dam safety assurance modification is being performed at full Federal expense.

STATUS OF LOCAL COOPERATION: Not applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$18,600,000 for the dam safety assurance modification is an increase of \$1,600,000 from the latest estimate (\$17,000,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Post Contract Award and Other Estimating Adjustments	\$1,600,000
Total	\$1,600,000

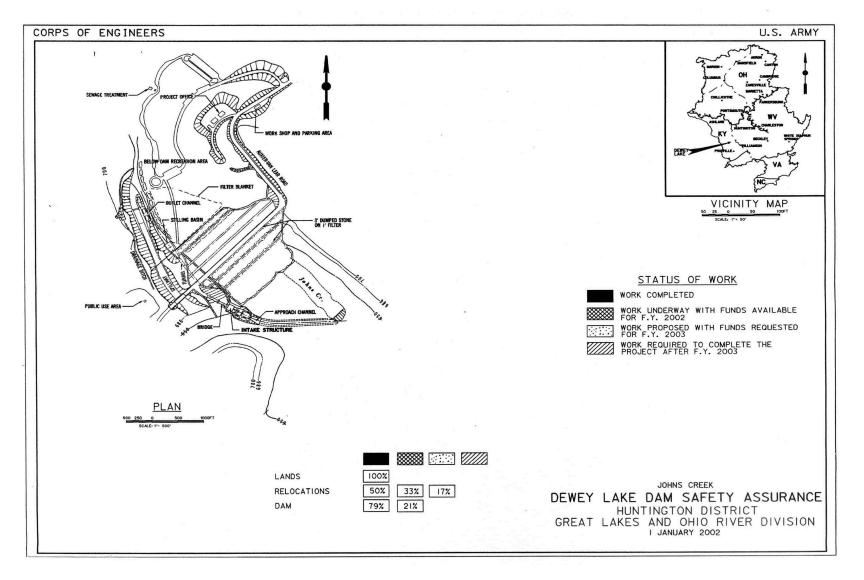
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment was completed in December 1996 and resulted in a Finding of No Significant Impact. A supplemental Environmental Assessment for relocation of State Route 302 and additional spoil sites was completed in January 2001, and resulted in a Finding of No Significant Impact.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were reprogrammed to the project in FY 1994 from funds appropriated for the initiation of dam safety projects.

The Dewey Lake, Kentucky Spillway Deficiency Report for the Dam Safety Assurance Program was approved by the Assistant Secretary of the Army for Civil Works on June 23, 1994.

The scheduled completion date of September 2004 is a slippage from the latest completion date (FY 2002) of September 2003 presented to Congress. This change is due to a revised design which resulted in the addition of parapet wall construction to the basic dam safety project.

Division: Great Lakes & Ohio River District: Huntington Dewey Lake, KY (Dam Safety Assurance)



4 February 2002

APPROPRIATION TITLE: Construction, General - (Dam Safety Assurance)

PROJECT: Bluestone Lake, West Virginia (Dam Safety Assurance) (Continuing)

LOCATION: The dam is located in southern West Virginia, in Summers County, on the New River two miles south of Hinton, West Virginia. It is situated 2.5 miles downstream from the confluence of the New and Bluestone Rivers, and 0.8 miles upstream from the confluence of the New and Greenbrier Rivers.

DESCRIPTION: The dam modifications include stability improvements such as installation of post tensioning high strength steel anchors, construction of mass concrete thrust blocks at the downstream face of the dam, and buttressing of the gate piers to resist increased hydraulic loading. The height of the dam will be raised by 8 feet and an additional monolith constructed at the east abutment to prevent overtopping of the existing dam and safely accommodate the probable maximum flood. A floodgate closure will be constructed across a state highway at the west abutment. The existing hydropower penstocks will be extended and retrofitted with gates to supplement the discharge capacity of the spillway and outlet works.

AUTHORIZATION: Executive Order of the President 7183-A, September 12, 1935; Flood Control Acts of 1936 and 1938.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA:

**Original Project** 

Actual Federal Cost \$ 28.618.100

Actual Non-Federal Cost \$ 0

Total Original Project Cost \$ 28,618,100

Division: Great Lakes & Ohio River District: Huntington

Bluestone Lake, WV (Dam Safety Assurance)

#### SUMMARIZED FINANCIAL DATA: (continued)

					PHYSICAL
Project Modification			STATUS	PERCENT	COMPLETION
			(1 Jan 2002)	COMPLETE	SCHEDULE
Estimated Federal Cost	\$ 118,000,000				
			Project Modification	18	Sep 2008
Estimated Non-Federal Cost	0				
			F	PHYSICAL DATA	
Total Estimated Modification Cost	\$ 118,000,000				
			Increase height of da		
Total Estimated Project Cost	\$ 146,618,100				cross State Route 20;
			modify penstocks to	• •	narge capacity;
			relocate electrical lin	es.	
		4001114			
		ACCUM			
		PCT OF EST			
Alla 1' 1 - 00 O 1 0001	<b>#</b> 44.050.000	FED COST			
Allocations to 30 September 2001	\$ 11,253,000				
Conference Allowance for FY 2002	12,000,000				
Allocation for FY 2002	10,082,000 1/				
Allocations through FY 2002	21,335,000	18			
Allocation Requested for FY 2003	8,500,000	25			

88.165.000

Programmed Balance to Complete after FY 2003

Unprogrammed Balance to Complete after FY 2003

JUSTIFICATION: The probable maximum flood is estimated to overtop the existing dam by 8 feet. Evaluations to date indicate the dam is in imminent danger of failure at pool levels approaching the top of dam. Dam failure would cause catastrophic flooding along the Greenbrier, New, Gauley, Kanawha, and Elk Rivers, including the metropolitan area and heavily industrialized capital city of Charleston, West Virginia. This is a serious public safety concern, with more than 115,000 persons at risk. Property damage would exceed \$6.5 billion.

Division: Great Lakes & Ohio River

District: Huntington

Bluestone Lake, WV

(Dam Safety Assurance)

<sup>1/</sup> Reflects \$1,918,000 reduction assigned as savings and slippage.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Construction	\$ 6,500,000
Planning, Engineering and Design	1,500,000
Construction Management	500,000

Total \$ 8,500,000

NON-FEDERAL COST: None. The dam safety assurance modification is being performed at full Federal expense.

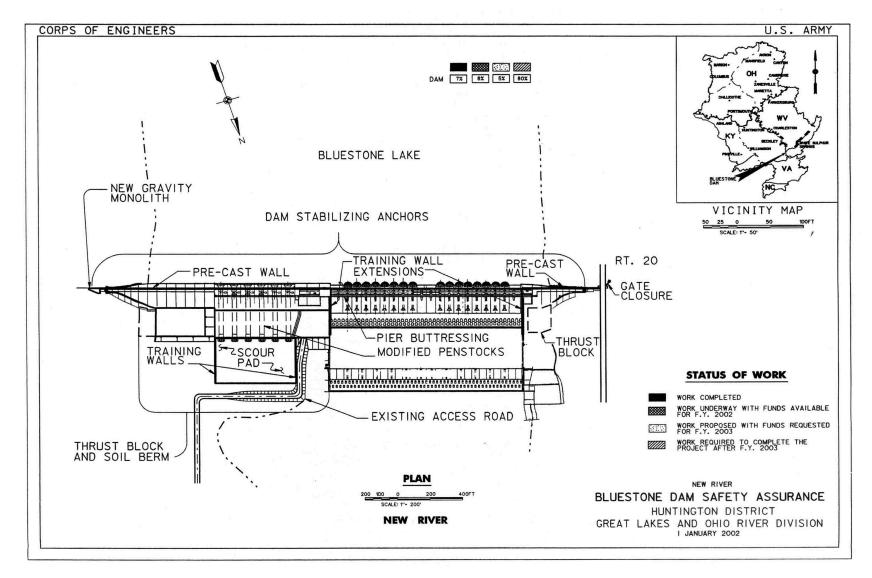
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$ 118,000,000 is an increase of \$ 5,700,000 from the latest estimate (\$112,300,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 5,700,000
Total	\$ 5,700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with EPA on August 31, 1998.

OTHER INFORMATION: The scheduled completion date of September 2008 has not changed from the date last presented to Congress (FY2002).

Division: Great Lakes & Ohio River District: Huntington Bluestone Lake, WV (Dam Safety Assurance)



APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: London Locks and Dam, West Virginia (Major Rehabilitation) (Continuing)

LOCATION: The London Locks and Dam project in Kanawha County, West Virginia consists of a non-navigable high lift dam with two 360- by 56-foot lock chambers. The project is located at river mile 82.8 on the Kanawha River, the most upstream of the Kanawha's three locks and dams. The dam provides a 9-foot navigable depth for a distance of 7.8 miles along the Kanawha River upstream to the head of navigation.

DESCRIPTION: The river lock chamber length will be extended by removing the existing upper miter gates, and re-installing those gates upstream at the emergency dam sill, but still within the confines of the existing lock walls. The upper guard wall is in a failure mode and will be replaced. Other rehabilitation efforts in the river chamber include epoxy crack and joint repair, replacement of missing or damaged wall armor, corner protection, check posts, line hooks, and grating. The existing monolithic concrete upstream guard wall will be removed, along with approximately 28,000 cubic yards of existing rock fill originally placed to stabilize the wall and the rock filled timber cribbing foundation. Some disposal material will be used to construct a flow control dike in the tailwater to improve the lower approach condition, and the remainder will be disposed of by random boulder placement in the upper Marmet pool, the designated disposal area at the Winfield locks and dam, or other existing approved landfills.

AUTHORIZATION: River and Harbor Act of 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 25.1 to 1 at 7 1/8 percent.

TOTAL BENEFIT-COST RATIO: 21.1 to 1 at 7 1/8 percent.

INITIAL BENEFIT COST RATIO: 20.5 to 1 at 7 1/8 percent (FY 2000)

BASIS OF BENEFIT-COST RATIO: Economic evaluation approved in May 1997 at October 1996 price levels.

Division: Great Lakes & Ohio River

District: Huntington

London Locks and Dam, WV

(Major Rehabilitation)

	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
\$22,900,000		•	Sept 2003
0	•	-	9 56 ft. X 360 ft.
\$22,900,000	-		
GENERAL	INLAND WATERWAYS	ACCUM.	
APPNS.	TRUST FUNDS	FED. COST	
\$1,828,000 4,350,000 3,655,000 1/	\$ 1,828,000 4,350,000 3,655,000 2/		
5,483,000	5,483,000	48	
5,967,000 0 0	5,967,000 0	100	
	0 \$22,900,000 GENERAL APPNS. \$1,828,000 4,350,000 3,655,000 1/ 5,483,000 5,967,000	\$22,900,000 Entire  PHYSICAL D.  0 Existing: Loc Lift: \$22,900,000 Adjustment: E Re  INLAND WATERWAYS TRUST FUNDS  \$1,828,000 4,350,000 4,350,000 3,655,000 1/ 5,483,000 5,967,000 0 5,967,000 0 5,967,000 0 6	\$22,900,000 Entire Project 35  PHYSICAL DATA  0 Existing: Lock chambers: 2 © Lift: 24 ft.  \$22,900,000 Adjustment: Extend river cham Replace upper gual  INLAND ACCUM. WATERWAYS PCT. OF EST. APPNS. TRUST FUNDS FED. COST  \$1,828,000

<sup>1/</sup> Reflects \$695,000 reduction assigned as savings and slippage.

<sup>2/</sup> Reflects \$695,000 reduction assigned as savings and slippage.

JUSTIFICATION: The reliability of this project is in jeopardy. The upper guard wall has failed structurally. Its replacement is necessary to continue operation of the locks and is considered the baseline condition for the continued use of the existing project. Upper guard wall replacement will enable safe, reliable levels of service. Physical alteration (extension) to the existing riverward lock chamber size better serves modern tows, and will permit the chamber to accommodate two jumbo barges in a single lockage cycle, instead of one jumbo as limited by current lock size, and will increase the lock's capacity by 21 percent. Delays and queuing are substantially lessened. Coal is the major commodity passing through London locks. The average tonnage since 1989 has increased from 4.8 million tons (1989) to 6.1 million tons (2000), an annual increase of 2 percent. Traffic demand is expected to grow at an annual rate of 2.3 percent through 2050. Since 1988, jumbo barges have been the dominant barge type at London, and represent the largest component of the Kanawha River barge fleet. Use of jumbo barges is expected to grow, since commercial operators are showing an increased preference for these larger barges due to their efficiency on the rest of the inland waterway system. The existing lock size of 56- by 360-feet accommodates 4 standard barges in a single lockage, or one jumbo. Extension of the lock length will expand the capacity to two jumbo barges per lockage.

Average annual benefits for the project are \$1,379,127, all for commercial navigation.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Complete Construction	\$10,700,000
Engineering, and Design	600,000
Construction Management	634,000

Total \$11,934,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total costs of construction will be derived from the Inland Waterways Trust Fund.

Division: Great Lakes & Ohio River

District: Huntington

London Locks and Dam, WV

(Major Rehabilitation)

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$22,900,000 is an increase of \$700,000 from the latest estimate (\$22,200,000) presented to Congress (FY 2002). This change includes the following items.

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments	\$ -908,000 1,608,000
Total	\$ 700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment (EA) was circulated and approved. The Finding of No Significant Impact (FONSI) was signed on August 22, 1997. The EA was submitted in lieu of an Environmental Impact Statement since no significant adverse environmental impacts are anticipated. The proposed improvements are limited to the immediate vicinity of a frequently disturbed lock approach, involve water-based construction methods, will not result in an increase in system-wide navigation traffic, and will diversify the physical habitats available to aquatic organisms.

OTHER INFORMATION: Funds for preconstruction engineering and design were appropriated in FY 1997 and FY 1998, prior to a determination that the proposed project would be a major rehabilitation effort. Funds to initiate construction were appropriated in FY 2000.

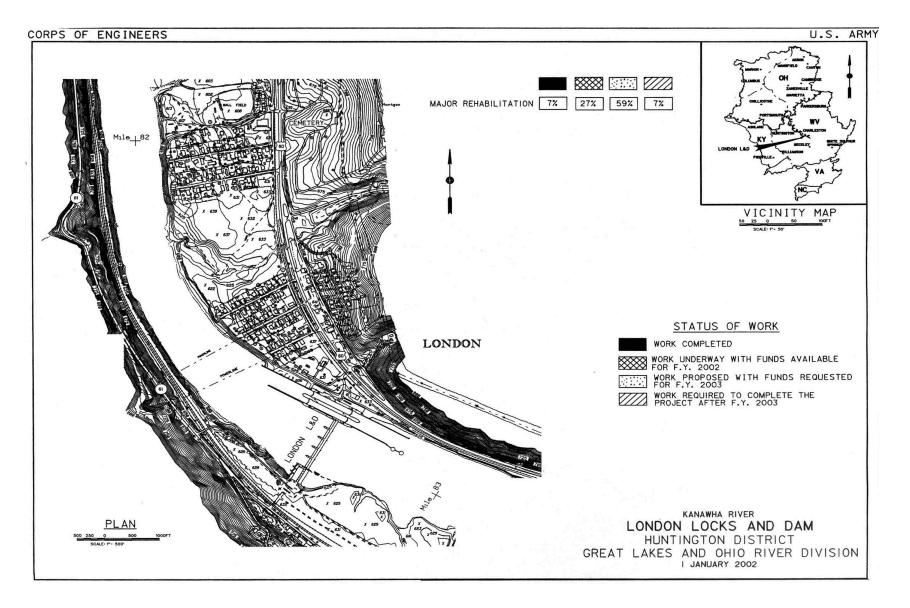
The scheduled completion date of September 2003 is an acceleration from the latest completion date of September 2004 presented to Congress (FY 2002). This change is due to the advancement of the award of the major rehabilitation contract.

Division: Great Lakes & Ohio River

District: Huntington

London Locks and Dam, WV

(Major Rehabilitation)



4 February 2002

169

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

#### 1. Navigation

#### a. Channels and Harbors

The program request of \$68,482,000 provides for the operational requirements of 91 projects. Requirements include: dredging, snagging, repairing channel stabilization works, harbor jetties, navigation structures, constructing bulkheads and confined disposal areas.

	ESTIMATED OB	SLIGATIONS (\$)	Re	ason For Change and Major Maintenance Items	
	FY 2002	FY 2003	1.	Reason for Change in Operations from FY 2002 to	
State/	TOTAL	TOTAL	_	FY 2003 (10% +/-).	
Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).	
	(Iviainteriance)	(Waintenance)		(Tilleshold \$300,000).	
Illinois					
Calumet Harbor	4,086,000	3,190,000			
and River	(203,000)	(203,000)	1.	None.	
(IL & IN)	(3,883,000)	(2,987,000)	2.	Repair, reinforce and upgrade stone dock; repair combined disposal facility;	
,	,	, , ,		perform maintenance dredging.	
Chicago Harbor	3,044,000	2,616,000			
· ·	(1,607,000)	(1,612,000)	1.	None.	
	(1,437,000)	(1,004,000)	2.	Repair deteriorated breakwater - southerly extension G.	
Chicago River	362,000	362,000			
<b>S</b>	(362,000)	(362,000)	1.	None.	
	(0)	(0)	2.	None.	
Lake Michigan	994,000	1,037,000			
Diversion	(994,000)	(1,037,000)	1.	None.	
	(0)	(0)	2.	None.	
Waukegan Harbor	865,000	1,270,000			
Waakegan Harbor	(70,000)	(70,000)	1.	None.	
	(795,000)	(1,200,000)	2.	Dredge the harbor approach channel.	
	(100,000)	(1,200,000)		•	170
			4 Febru	uary 2002	170

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. Navigation (continued)
  - a. Channels and Harbors (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Rea</b> 1. 2.	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
<b>Indiana</b> Burns Harbor	2,409,000 (307,000) (2,102,000)	3,427,000 (227,000) (3,200,000)	1. 2.	Variation in monitoring costs for underwater reef in FY 2002.  Repair deteriorated breakwater – Section A.
Burns Waterway Small Boat Harbor	0 (0) (0)	1,606,000 (0) (1,606,000)	1. 2.	None. Repair deteriorated breakwater.
Indiana Harbor	64,000 (64,000) (0)	64,000 (64,000) (0)	1. 2.	None. None.
Michigan City Harbor	1,653,000 (171,000) (1,482,000)	1,132,000 (332,000) (800,000)	1. 2.	Variation in cost of Phase 2 Dredged Material Management Plan in FY 2003. Repair deteriorated breakwater.
<b>Kentucky</b> Big Sandy Harbor	1,035,000 (35,000) (1,000,000)	35,000 (35,000) (0)	1. 2.	None. None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - a. Channels and Harbors (continued)

State/ Project Name	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> 1. 2.	Ason For Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
<b>Kentucky</b> (continued) Licking River Open Channel Work	0 (0) (0)	28,000 (0) (28,000)	1. 2.	None. None.
<b>Michigan</b> Alpena Harbor	0 (0) (0)	222,000 (15,000) (207,000)	1. 2.	Conduct condition surveys in FY 2003. None.
Arcadia Harbor	45,000 (21,000) (24,000)	107,000 (20,000) (87,000)	1. 2.	None. None.
Bay Port Harbor	0 (0) (0)	299,000 (15,000) (284,000)	1. 2.	Conduct condition surveys in FY 2003. None.
Black River Port Huron	56,000 (15,000) (41,000)	14,000 (14,000) (0)	1. 2.	None. None.
Black River Upper	0	12,000		

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - a. Channels and Harbors (continued)

ESTIMATED OBLIGATIONS (\$)				Reason For Change and Major Maintenance Items			
	FY 2002	FY 2003	1.	Reason for Change in Operations from FY 2002 to			
State/	TOTAL	TOTAL		FY 2003 (10% +/-).			
Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).			
Michigan (continued)							
Peninsula	(0)	(12,000)	1.	Conduct condition surveys in FY 2003.			
	(0)	(0)	2.	None.			
Channels in Lake	120,000	128,000					
St. Clair	(79,000)	(77,000)	1.	None.			
	(41,000)	(51,000)	2.	None.			
Charlevoix Harbor	126,000	124,000					
	(43,000)	(40,000)	1.	None.			
	(83,000)	(84,000)	2.	None.			
Cheboygan Harbor	0	12,000					
	(0)	(12,000)	1.	Conduct condition surveys in FY 2003.			
	(0)	(0)	2.	None.			
Clinton River	28,000	10,000					
	(16,000)	(10,000)	1.	Variation in condition survey costs in FY2002.			
	(12,000)	(0)	2.	None.			

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - a. Channels and Harbors (continued)

State/	ESTIMATED OB FY 2002 TOTAL	FY 2003 TOTAL	1.	Reason for Change and Major Maintenance Items  Reason for Change in Operations from FY 2002 to  FY 2003 (10% +/-).
Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Michigan (continued)				
Detroit River	3,280,000 (1,067,000) (2,213,000)	3,192,000 (1,024,000) (2,168,000)	1. 2.	None. Locate and remove obstructions and closure of dikes at cell 3 and point Mouillee.
Frankfort Harbor	166,000 (47,000) (119,000)	177,000 (82,000) (95,000)	1. 2.	Conduct sediment sampling in FY 2003. None.
Grand Haven Harbor	1,635,000 (351,000) (1,284,000)	1,250,000 (276,000) (974,000)	1. 2.	Conduct dredged material management plans study in FY 2002. Repair concrete cap, north pier, section B.
Grand Traverse Bay Harbor	71,000 (21,000)	227,000 (50,000)	1.	Variation in condition survey costs and conduct archeological investigation in FY 2003.
	(50,000)	(177,000)	2.	None.
Holland Harbor	616,000 (196,000) (420,000)	505,000 (188,000) (317,000)	1. 2.	None. None.

4 February 2002

174

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. Navigation (continued)
  - a. Channels and Harbors (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<u>Re</u> 1. 2.	ason For Change and Major Maintenance Items  Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).  Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Michigan (continued)				
Inland Route	37,000 (37,000) (0)	33,000 (33,000) (0)	1. 2.	Variation in condition survey costs in FY 2002. None.
Keweenaw Waterway	363,000 (65,000) (298,000)	450,000 (105,000) (345,000)	1. 2.	Conduct archeological investigation in FY 2003. None.
Lac La Belle Harbor	116,000 (18,000) (98,000)	102,000 (10,000) (92,000)	1. 2.	Variation in condition survey costs and conduct real estate activities in FY 2002. None.
Leland Harbor	197,000 (23,000) (174,000)	174,000 (20,000) (154,000)	1. 2.	Variation in condition survey costs in FY 2002. None.
Lexington Harbor	0	704,000	4	Conduct condition curvous, real estate estivities and beach neurishment
	(0)	(54,000)	1.	Conduct condition surveys, real estate activities and beach nourishment activities in FY 2003.  Mitigating shore damage.
	(0)	(650,000)	2.	Mitigating shore damage.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. Navigation (continued)
  - a. Channels and Harbors (continued)

State/ <u>Project Name</u>	ESTIMATED OBLIGATIONS (\$)		Reason For Change and Major Maintenance Items					
	FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	1. 2.	Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).				
					(11116311616 \$600,000).			
					Michigan (continued)			
				Little Lake Harbor	66,000	462,000		
(17,000)	(12,000)	1.	Variation in condition survey costs in FY 2002.					
(49,000)	(450,000)	2.	None.					
Ludington Harbor	456,000	95,000						
	(100,000)	(95,000)	1.	None.				
	(356,000)	(0)	2.	None.				
Manistee Harbor	55,000	247,000						
	(55,000)	(47,000)	1.	Variation in condition survey costs in FY 2002.				
	(0)	(200,000)	2.	None.				
Manistique Harbor	21,000	50,000						
	(10,000)	(50,000)	1.	Conduct archeological investigations in FY 2003.				
	(11,000)	(0)	2.	None.				
Marquette Harbor	168,000	193,000						
	(13,000)	(10,000)	1.	Variation in condition survey costs in FY 2002.				
	(155,000)	(183,000)	2.	None.				
Menominee Harbor	104,000	281,000						
(MI & WI)	(20,000)	(35,000)	1.	Conduct sediment coordination in FY 2003.				
	(84,000)	(246,000)	2.	None.				

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. Navigation (continued)
  - a. Channels and Harbors (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> 1. 2.	ason For Change and Major Maintenance Items  Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).  Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Michigan (continued)				
Monroe Harbor	52,000 (52,000) (0)	792,000 (62,000) (730,000)	1. 2.	Variation in condition survey costs in FY 2003. Perform dredging of critical shoals.
Muskegon Harbor	470,000 (29,000) (441,000)	387,000 (21,000) (366,000)	1. 2.	Variation in condition survey costs in FY 2002. None.
New Buffalo Harbor	0 (0) (0)	156,000 (20,000) (136,000)	1. 2.	Conduct condition surveys in FY 2003. None.
Ontonagon Harbor	1,041,000 (34,000) (1,007,000)	1,745,000 (78,000) (1,667,000)	1. 2.	Perform archaeological investigations and real estate activities in FY 2003. Repair east and west pier failed tie rods and wave attenuator.
Pentwater Harbor	267,000 (34,000) (233,000)	25,000 (25,000) (0)	1. 2.	Variation in condition survey costs in FY 2002. None.

### 1. Navigation (continued)

### a. Channels and Harbors (continued)

	<b>ESTIMATED OBLIGATIONS (\$)</b>			ason For Change and Major Maintenance Items
	FY 2002	FY 2003	1.	Reason for Change in Operations from FY 2002 to
State/	TOTAL	TOTAL		FY 2003 (10% +/-).
<u>Project Name</u>	(Operations)	(Operations)	2.	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)		(Threshold \$500,000).
Michigan (continued)				
Port Sanilac Harbor	0	501,000		
	(0)	(30,000)	1.	Perform beach nourishment activities in FY 2003.
	(0)	(471,000)	2.	None.
Portage Lake Harbor	1,812,000	21,000		
_	(24,000)	(21,000)	1.	Variation in condition survey costs in FY 2002.
	(1,788,000)	(0)	2.	None.
Rouge River	512,000	933,000		
-	(90,000)	(127,000)	1.	Conduct sediment evaluation report in FY 2003.
	(422,000)	(806,000)	2.	Perform dredging of critical shoals.
Saginaw River	1,288,000	2,351,000		
-	(482,000)	(420,000)	1.	Perform confined disposal facility study in FY 2002.
	(806,000)	(1,931,000)	2.	Perform dredging of bay and river annual shoals.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - a. Channels and Harbors (continued)

	ESTIMATED OBLIGATIONS (\$)			ason For Change and Major Maintenance Items
0	FY 2002	FY 2003	1.	Reason for Change in Operations from FY 2002 to
State/ Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Michigan (continued)				
Saugatuck Harbor	158,000	2,803,000		
	(35,000)	(20,000)	1.	Variation in condition survey activities in FY 2002.
	(123,000)	(2,783,000)	2.	Repair north and south revetment, sections C-G, phase II.
South Haven Harbor	1,628,000	54,000		
	(25,000)	(54,000)	1.	Perform beach nourishment activities in FY 2003.
	(1,603,000)	(0)	2.	None.
St. Clair River	771,000	694,000		
	(254,000)	(177,000)	1.	Perform Dredged Material Management Plan study in FY 2002.
	(517,000)	(517,000)	2.	Locate and remove obstructions from channel.
St. Joseph Harbor	844,000	996,000		
	(315,000)	(182,000)	1.	Perform Dredged Material Management Plan study in FY 2002.
	(529,000)	(814,000)	2.	None.
White Lake Harbor	0	67,000		
	(0)	(67,000)	1.	Perform condition survey and beach nourishment activities in FY 2003.
	(0)	(0)	2.	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - a. Channels and Harbors (continued)

	ESTIMATED OBLIGATIONS (\$)			ason For Change and Major Maintenance Items
2	FY 2002	FY 2003	1.	Reason for Change in Operations from FY 2002 to
State/	TOTAL (Operations)	TOTAL (Operations)	2.	FY 2003 (10% +/-). Major Majorton and Stome Budgeted in FY 2003
Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	۷.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Minnesota				
Duluth-Superior	3,038,000	4,506,000		
Harbor	(885,000)	(912,000)	1.	None.
(MN & WI)	(2,153,000)	(3,594,000)	2.	Repair superior entry south pier and breakwater; perform dredging.
Two Harbors Harbor	0	167,000		
	(0)	(12,000)	1.	Perform condition survey and real estate activities in FY 2003.
	(0)	(155,000)	2.	None.
New York				
Buffalo Harbor	515,000	643,000		
	(63,000)	(83,000)	1.	Variation in condition survey costs in FY 2003.
	(452,000)	(560,000)	2.	None.
Cape Vincent	0	11,000		
cape vincent	(0)	(11,000)	1.	Conduct condition surveys in FY 2003.
	(0)	(0)	2.	None.
	(3)	(3)		1101101
Cattaraugus Creek Harbor	0	50,000		
9	(0)	(50,000)	1.	Conduct sediment sampling in FY 2003.
	(0)	(0)	2.	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - a. Channels and Harbors (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> 1. 2.	ason For Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
New York (continued) Dunkirk Harbor	280,000	480,000		
Duliklik Halbol	(20,000) (260,000)	(30,000) (450,000)	1. 2.	Variation in condition survey costs in FY 2003. None.
Irondequoit Bay Harbor	0 (0) (0)	10,000 (10,000) (0)	1. 2.	Perform real estate management in FY 2003. None.
Oak Orchard Harbor	0 (0) (0)	15,000 (15,000) (0)	1. 2.	Perform environmental compliance audit in FY 2003. None.
Olcott Harbor	0 (0) (0)	10,000 (10,000) (0)	1. 2.	Perform real estate management in FY 2003. None.
Rochester Harbor	35,000 (35,000) (0)	35,000 (35,000) (0)	1. 2.	None. None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - a. Channels and Harbors (continued)

	ESTIMATED OBLIGATIONS (\$)			Reason For Change and Major Maintenance Items		
State/	FY 2002 TOTAL	FY 2003 TOTAL	1.	Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).		
Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).		
New York (continued)						
Sturgeon Point Small	0	20,000				
Point Harbor	(0)	(0)	1.	None.		
	(0)	(20,000)	2.	None.		
Wilson Harbor	0	20,000				
	(0)	(20,000)	1.	Conduct condition surveys in FY 2003.		
	(0)	(0)	2.	None.		
Ohio						
Ashtabula Harbor	1,127,000	1,915,000				
	(26,000)	(125,000)	1.	Variation in condition survey costs, sediment sampling and environmental analysis in FY 2003.		
	(1,101,000)	(1,790,000)	2.	Perform breakwater repairs and dewatering facility construction.		
Cleveland Harbor	4,680,000	3,520,000				
	(100,000)	(170,000)	1.	Perform environmental testing and formulation of master plans in FY 2003.		
	(4,580,000)	(3,350,000)	2.	Perform dredging, breakwater repairs and combined disposal facility repairs.		
Conneaut Harbor	30,000	585,000				
	(30,000)	(30,000)	1.	None.		
	(0)	(555,000)	2.	None.		

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - a. Channels and Harbors (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> : 1.	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Ohio (continued)				
Fairport Harbor	1,107,000 (35,000) (1,072,000)	1,090,000 (40,000) (1,050,000)	1. 2.	Variation in condition survey costs in FY 2003. Perform maintenance dredging.
Huron Harbor	940,000 (40,000) (900,000)	860,000 (50,000) (810,000)	1. 2.	Variation in condition survey costs in FY 2003. Perform maintenance dredging.
Lorain Harbor	950,000 (40,000) (910,000)	3,400,000 (50,000) (3,350,000)	1. 2.	Variation in condition survey costs in FY 2003. Perform west and east pier repair and maintenance dredging.
Port Clinton Harbor	500,000 (0) (500,000)	1,275,000 (100,000) (1,175,000)	1. 2.	Conduct sediment sampling and analysis. Perform dredging and repair/construction of jetties and west shore.
Portsmouth Harbor	0 (0) (0)	150,000 (0) (150,000)	1. 2.	None. None.

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APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. Navigation (continued)
  - a. Channels and Harbors (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<u>Re</u> 1. 2.	FY 2003 (10% +/-).
Ohio (continued)	_			
Rocky River	0 (0) (0)	30,000 (30,000) (0)	1. 2.	Perform condition survey and real estate activities in FY 2003. None.
Sandusky Harbor	850,000 (50,000) (800,000)	1,010,000 (135,000) (875,000)	1. 2.	Variation in condition survey costs, sediment sampling and analysis in FY 2003. Perform maintenance dredging.
Toledo Harbor	2,630,000 (120,000) (2,510,000)	3,525,000 (225,000) (3,300,000)	1. 2.	Variation in condition survey costs in FY 2003. Perform maintenance dredging
Touissant River	10,000 (10,000) (0)	520,000 (20,000) (500,000)	1. 2.	Perform condition surveys in FY 2003. Perform maintenance dredging.
Vermilion Harbor	0 (0) (0)	205,000 (30,000) (175,000)	1. 2.	Perform condition survey and real estate activities in FY 2003.  None.
West Harbor	0 (0) (0)	30,000 (30,000) (0)	1. 2. 4 Febru	Perform condition surveys in FY 2003. None. uary 2002 184

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - a. Channels and Harbors (continued)

State/ <u>Project Name</u>	FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> 1. 2.	ason For Change and Major Maintenance Items  Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).  Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
<b>Pennsylvania</b> Erie Harbor	70,000 (70,000) (0)	60,000 (60,000) (0)	1. 2.	Variation in condition survey costs in FY 2002. None.
<b>West Virginia</b> Elk River Harbor	0 (0) (0)	440,000 (10,000) (430,000)	1. 2.	Perform channel condition surveys for biennial dredging in FY 2003. None.
<b>Wisconsin</b> Ashland Harbor	0 (0) (0)	180,000 (45,000) (135,000)	1. 2.	Perform condition surveys and environmental studies in FY 2003. None.
Green Bay Harbor	2,976,000 (315,000) (2,661,000)	1,924,000 (316,000) (1,608,000)	1. 2.	None. Perform maintenance dredging of critical shoals.
Kenosha Harbor	186,000 (15,000) (171,000)	1,315,000 (15,000) (1,300,000)	1. 2.	None. Repair north detached breakwater.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. Navigation (continued)
  - a. Channels and Harbors (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<u>Re</u> 1. 2.	ason For Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Wisconsin (continued)				
Kewaunee Harbor	243,000 (62,000) (181,000)	75,000 (75,000) (0)	1. 2.	Variation in condition survey costs in FY 2003. None.
Manitowoc Harbor	605,000 (73,000) (532,000)	278,000 (68,000) (210,000)	1. 2.	None. None.
Milwaukee Harbor	681,000 (288,000) (393,000)	789,000 (319,000) (470,000)	1. 2.	Variation in condition survey costs, perform sediment coordination in FY 2003. None.
Oconto Harbor	35,000 (35,000) (0)	13,000 (13,000) (0)	1. 2.	Perform limited dredged material management plans study in FY 2002.  None.
Port Washington Harbor	58,000 (12,000) (46,000)	261,000 (12,000) (249,000)	1. 2.	None. None.
Port Wing Harbor	384,000 (15,000) (369,000)	6,000 (6,000) (0)	1. 2. 4 Febru	Variation in condition survey costs in FY 2002. None.  uary 2002 186

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. Navigation (continued)
  - a. Channels and Harbors (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<u>Re</u> 1. 2.	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).	
Wisconsin (continued)	0	45.000			
Saxon Harbor	0 (0) (0)	45,000 (45,000) (0)	1. 2.	Perform condition survey and sediment sampling in FY 2003. None.	
Sheboygan Harbor	308,000 (46,000) (262,000)	1,603,000 (46,000) (1,557,000)	1. 2.	None. Repair south pier sections I, J and K and north concrete caps.	
Sturgeon Bay Harbor and Lake Michigan Ship Canal	118,000 (75,000) (43,000)	1,578,000 (73,000) (1,505,000)	1. 2.	None. Repair south revetment, section N.	
Two Rivers Harbor	528,000 (41,000) (487,000)	471,000 (15,000) (456,000)	1. 2.	Perform real estate and water quality monitoring activities in FY 2002. None.	
Other Projects Maintained Periodically	1,454,000 (484,000) (970,000)	0 (0) (0)			
TOTAL, Channels and Harbors	55,419,000 (10,386,000) (45,033,000)	68,482,000 (10,893,000) (57,589,000)	4 Fab	rany 2002	187

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

#### 1. Navigation (continued)

#### b. Locks, Dams and Canals

The program request of \$130,104,000 provides for the operational requirements of 12 projects. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies and parts for day-to-day functioning of projects; periodic maintenance, repairs and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

State/ Project Name	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b><u>Re</u></b> 1. 2.	ason For Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Kentucky	4.070.000	4 004 000		
Green and Barren Rivers	1,079,000 (1,079,000) (0)	1,081,000 (1,081,000) (0)	1. 2.	None. None.
Kentucky River	1,033,000 (913,000) (120,000)	400,000 (400,000) (0)	1. 2.	Reduced the number of lock operators in FY 2003. None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - b. Locks, Dams and Canals (continued)

State/ Project Name	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Rea</b> 1. 2.	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Kentucky (continued) Ohio River Locks and Dams - Louisville District (Lower River Segment, Mile 438.0 to Mile 981.0; KY, IL, IN & OH)	26,375,000 (12,546,000) (13,829,000)	30,969,000 (12,841,000) (18,128,000)	1. 2.	None. Repair stilling basin at Channelton Lock; dewater and inspect, perform gate change out, provide high mask lighting and modify 4 miter gate anchorages at Markland Lock; dewater and inspect and replace cable connections to tainter gates at JT Myers Lock; modify lower gate leaves, install intake screens and replace cable connections to tainter gates at Newburgh Lock; replace upper guide wall piling for flume system at L/D 53; replace lighting of lock at McAlpine Lock; repair bridge protection and mooring cells at Portland canal; Purchase replacement lock and dam parts; repair stilling basins at Ohio River dams; perform endangered species study.
Ohio River Open Channel Work - Louisville District (Lower River Segment, Mile 438.0 to Mile 981.0; KY, IL, IN & OH)	4,490,000 (617,000) (3,873,000)	5,577,000 (617,000) (4,960,000)	1. 2.	None. Perform navigation channel maintenance dredging; stabilize channel at Kentucky Peninsula in order to maintain authorized navigation channel.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - b. Locks, Dams and Canals (continued)

State/ Project Name	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> : 1. 2.	ason For Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
New York				
Black Rock Channel	3,595,000	1,041,000		
and Tonawanda	(745,000)	(610,000)	1	Update operation and maintenance manual in FY 2002.
Harbor	(2,850,000)	(431,000)	2.	None.
Pennsylvania				
Allegheny River	5,322,000	4,070,000		
, mognony ravor	(4,112,000)	(4,070,000)	1	None.
	(1,210,000)	(0)	2.	None.
Monongahela River	13,142,000	14,357,000		
(PA & WV)	(8,563,000)	(8,580,000)	1.	None.
(,	(4,579,000)	(5,777,000)	2.	Repair miter gate operating machinery, replace tow haulage units and renovate middle wall emptying butterfly valve at L/D 2; dewater lock chamber at L/D 4; maintenance of lock 2 through Opekiska.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - b. Locks, Dams and Canals (continued)

State/ Project Name	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> a 1. 2.	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Pennsylvania (continued) Ohio River Locks and Dams - Pittsburgh District (Upper River Segment, Mile 0.0 to Mile 127.2; PA, OH & WV)	22,652,000 (9,021,000) (13,631,000)	18,589,000 (8,900,000) (9,689,000)	1. 2.	None. Replace lift gates at Emsworth Lock; dewater river lock and install miter gates at New Cumberland Lock; dewater lock and repair filling emptying valves at Emsworth Lock; renovate middle and river wall filling (tainter) valves at Pike Island Lock; r5enovate middle and Land wall butterfly valves at Dashields Lock; maintenance from Emsworth Lock to Hannibal Lock.
Ohio River Open Channel Work - Pittsburgh District (Upper River Segment, Mile 0.0 to Mile 127.2; PA, OH & WV)	1,978,000 (0) (1,978,000)	488,000 (0) (488,000)	1. 2.	None. None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - b. Locks, Dams and Canals (continued)

State/ Project Name	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<u>Re</u> : 1. 2.	ason For Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Tennessee Chickamauga Lock, Tennessee River	2,222,000 (0) (2,222,000)	1,025,000 (0) (1,025,000)	1. 2.	None. Continue lock repair activities including performing post tensioning, inspections, shear reinforcement work, and instrumentation for the lock walls.
Tennessee River (TN, AL, KY & MS)	13,536,000 (5,768,000) (7,768,000)	15,794,000 (5,947,000) (9,847,000)	1. 2.	None. Dewater and repair Wilson main, Nickajack, and Pickwick Auxiliary Locks; fabricate and repair lock miter gate anchorages and routine maintenance at Tennessee River Locks.
<b>West Virginia</b> Kanawha River	7,026,000 (4,459,000) (2,567,000)	7,544,000 (4,289,000) (3,255,000)	1. 2.	None. Perform channel maintenance dredging, repair roller gate aprons at Marmet and London Locks, rehabilitate roller gate aprons at Winfield Lock and purchase replacement permanent operating equipment.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - b. Locks, Dams and Canals (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	LIGATIONS (\$) FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> . 1. 2.	ason For Change and Major Maintenance Items  Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).  Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
West Virginia (continued) Ohio River Locks and Dams - Huntington District (Middle River Segment, Mile 127.2 to Mile 438.0; WV, KY & OH)	18,182,000 (8,941,000) (9,241,000)	18,991,000 (9,068,000) (9,923,000)	1. 2.	None. Perform structural underwater diving inspections; dewater/repair main lock miter and emergency gates, replace side arm plates/tainter gates, clean chamber and purchase replacement miter gates at Meldahl; repair tainter gate anchor bolts, replace dam machinery enclosures and replace tender boat at Racine Lock; rehabilitate main chamber miter gates at Willow Island; metalize dam tainter gates and construct mooring facility at Belleville; purchase hydraulic cylinders; replace project intake screens at Greenup; replace project screens at Meldahl and Racine.
Ohio River Open Channel Work - Huntington District (Middle River Segment, Mile 127.2 to Mile 438.0; WV, KY & OH)	2,289,000 (529,000) (1,760,000)	3,260,000 (593,000) (2,667,000)	1. 2.	Variation in costs for water control activities in FY 2003. Perform annual navigation channel maintenance dredging.
Tygart Lake	983,000 (670,000) (313,000)	5,546,000 (668,000) (4,878,000)	1. 2.	None. Replace bulkhead hoist system, upgrade electrical and hydraulic systems and repair sluice gates.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 1. **Navigation** (continued)
  - b. Locks, Dams and Canals (continued)

State/ Project Name	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> : 1. 2.	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
<b>Wisconsin</b> Fox River	7,868,000 (1,609,000) (6,259,000)	1,372,000 (1,312,000) (60,000)	1. 2.	Transfer of locks activities in FY 2002. None.
TOTAL, Locks, Dams and Canals	131,772,000 (59,572,000) (72,200,000)	130,104,000 (58,976,000) (71,128,000)		
TOTAL - NAVIGATION	187,191,000 (69,958,000) (117,233,000)	198,586,000 (69,869,000) (128,717,000)		

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

#### 2. Flood Control

#### a. **Reservoirs**

The program request of \$73,776,000 provides for the operational requirements of 72 flood control reservoirs. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials, and parts for day-to-day functioning of projects; periodic maintenance, repairs, and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> . 1. 2.	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Indiana				
Brookville Lake	792,000	732,000		
	(792,000)	(732,000)	1.	None.
	(0)	(0)	2.	None.
Cagles Mill Lake	682,000	634,000		
	(682,000)	(634,000)	1.	None.
	(0)	(0)	2.	None.
Cecil M. Harden Lake	829,000	704,000		
Com III. Hardon Zako	(779,000)	(704,000)	1.	None.
	(50,000)	(0)	2.	None.
J. Edward Roush	690,000	1,108,000		
Lake	(690,000)	(763,000)	1.	Conduct dam safety training and perform additional activities for the operation of
	(0)	(345,000)	2.	dams, reservoirs, service facilities and pump plants in FY 2003.  None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

	ESTIMATED OB	LIGATIONS (\$)	Re	ason For Change and Major Maintenance Items	
State/	FY 2002 TOTAL	FY 2003 TOTAL	1.	Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).	
Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).	
Indiana (continued)					
Mississinewa Lake	817,000	853,000	4	N.	
	(817,000)	(853,000)	1.	None.	
	(0)	(0)	2.	None.	
Monroe Lake	819,000	759,000			
	(819,000)	(759,000)	1.	None.	
	(0)	(0)	2.	None.	
Patoka Lake	757,000	727,000			
r diona zano	(757,000)	(727,000)	1.	None.	
	(0)	(0)	2.	None.	
Salamonie Lake	710.000	640,000			
Salamonie Lake	710,000 (710,000)	649,000 (649,000)	1	None.	
	(0)	(0)	2.	None.	
	(0)	(0)	۷.	None.	
Kentucky					
Barren River Lake	2,300,000	2,074,000			
	(1,900,000)	(1,939,000)	1.	None.	
	(400,000)	(135,000)	2.	None.	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

	<b>ESTIMATED OB</b>	LIGATIONS (\$)	Reason For Change and Major Maintenance Items		
	FY 2002	FY 2003	1.	Reason for Change in Operations from FY 2002 to	
State/	TOTAL	TOTAL		FY 2003 (10% +/-).	
<u>Project Name</u>	(Operations)	(Operations)	2.	Major Maintenance Items Budgeted in FY 2003	
	(Maintenance)	(Maintenance)		(Threshold \$500,000).	
Kentucky (continued)					
Buckhorn Lake	1,440,000	1,703,000			
	(1,115,000)	(1,252,000)	1.	Conduct periodic inspections/reporting and perform additional activities for	
				operations in the Flood Damage Reduction function in FY 2003.	
	(325,000)	(451,000)	2.	None.	
Carr Creek Lake	1,611,000	1,343,000			
	(1,361,000)	(1,343,000)	1.	None.	
	(250,000)	(0)	2.	None.	
Cave Run Lake	984,000	833,000			
	(834,000)	(804,000)	1.	None.	
	(150,000)	(29,000)	2.	None.	
Dewey Lake	1,327,000	1,555,000			
•	(1,251,000)	(1,330,000)	1.	None.	
	(76,000)	(225,000)	2.	None.	
ishtrap Lake	1,865,000	1,927,000			
•	(1,783,000)	(1,920,000)	1.	None.	
	(82,000)	(7,000)	2.	None.	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

	ESTIMATED OBLIGATIONS (\$)			ason For Change and Major Maintenance Items
	FY 2002	FY 2003	1.	Reason for Change in Operations from FY 2002 to
State/	TOTAL	TOTAL		FY 2003 (10% +/-).
Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Kentucky (continued)				
Grayson Lake	1,251,000	1,259,000		
-	(1,120,000)	(1,168,000)	1.	None.
	(131,000)	(91,000)	2.	None.
Green River Lake	2,087,000	1,769,000		
	(1,611,000)	(1,619,000)	1.	None.
	(476,000)	(150,000)	2.	None.
Martins Fork Lake	704,000	623,000		
	(548,000)	(585,000)	1.	None.
	(156,000)	(38,000)	2.	None.
Nolin Lake	1,860,000	1,992,000		
	(1,740,000)	(1,892,000)	1.	None.
	(120,000)	(100,000)	2.	None.
Paintsville Lake	1,319,000	982,000		
	(1,259,000)	(932,000)	1.	Perform water supply reallocation study; perform flood frequency analysis; draft water control plans and drought contingency plan; increased recreation activities in FY 2002.
	(60,000)	(50,000)	2.	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

State/ Project Name	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<u>Re</u> 1. 2.	ason For Change and Major Maintenance Items  Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).  Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Kentucky (continued)				
Rough River Lake	2,069,000 (1,923,000) (146,000)	2,120,000 (1,974,000) (146,000)	1. 2.	None.
Taylorsville Lake	993,000 (993,000) (0)	913,000 (876,000) (37,000)	1. 2.	Perform additional activities for operations for the recreation function in FY 2002. None.
Yatesville Lake	1,088,000 (1,063,000) (25,000)	1,156,000 (1,131,000) (25,000)	1. 2.	None. None.
New York				
Mt. Morris Lake	2,503,000 (1,215,000) (1,288,000)	2,040,000 (1,210,000) (830,000)	1. 2.	None. None.
Ohio				
Alum Creek Lake	641,000 (612,000)	775,000 (720,000)	1.	Variation in costs of water control activities, data collection and analysis/studies; perform additional activities in water control analysis and project condition studies in FY 2003.
	(29,000)	(55,000)	2.	None.
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APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

	ESTIMATED OB	BLIGATIONS (\$)	Re	ason For Change and Major Maintenance Items
State/	FY 2002 TOTAL	FY 2003 TOTAL	1.	Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).
Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Ohio (continued)				
Berlin Lake	2,222,000	1,857,000		
	(1,388,000)	(1,373,000)	1.	None.
	(834,000)	(484,000)	2.	None.
Caesar Creek Lake	1,142,000	1,234,000		
	(1,131,000)	(1,206,000)	1.	None.
	(11,000)	(28,000)	2.	None.
Clarence J. Brown	723,000	773,000		
Dam and Reservoir	(717,000)	(767,000)	1.	None.
	(6,000)	(6,000)	2.	None.
Deer Creek Lake	648,000	711,000		
	(581,000)	(701,000)	1.	Variation in costs of water control activities, data collection and analysis/studies; perform additional activities in water control analysis and management of recreation areas in FY 2003.
	(67,000)	(10,000)	2.	None.
Delaware Lake	662,000	932,000		
2018dio Lano	(574,000)	(644,000)	1.	Variation in costs of water control activities, data collection and analysis/studies; perform additional activities in water control analysis and develop water control plans in FY 2003.
	(88,000)	(288,000)	2.	None.
	(,)	(===,===)		uary 2002 200

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

Y 2002 FY 2003 OTAL TOTAL ations) (Operations) nance) (Maintenance)	<b>Rea</b> 1. 2.	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
29,000 576,000		
0,000) (471,000)	1.	None.
(9,000) (105,000)	2.	None.
N9 NNN 789 NNN		
· · ·	1	None.
, , ,	2.	None.
(100,000)		
54,000 1,036,000		
(958,000)	1.	None.
(78,000) (78,000)	2.	None.
07,000 6,133,000		
0,000) (4,934,000)	1.	None.
7,000) (1,199,000)	2.	None.
	Y 2002 OTAL         FY 2003 TOTAL           Ations) nance)         (Operations) (Maintenance)           29,000 (Maintenance)         576,000 (Maintenance)           29,000 (Maintenance)         576,000 (Maintenance)           29,000 (Maintenance)         789,000 (Maintenance)           39,000 (Maintenance)         789,000 (Maintenance)           40,000 (Maintenance)         789,000 (Maintenance)           57,000 (Maintenance)         789,000 (Maintenance)           64,000 (Maintenance)         789,000 (Maintenance)           64,000 (Maintenance)         1,036,000 (Maintenance)           64,000 (Maintenance)         1,036,000 (Maintenance)           67,000 (Maintenance)         1,036,000 (Maintenance)           6	72002 FY 2003 TOTAL Ations) (Operations) (Maintenance) 2.  29,000 576,000 (471,000) 1.  9,000) (105,000) 2.  29,000 789,000 (686,000) 1.  3,000) (686,000) 1.  3,000) (103,000) 2.  34,000 1,036,000 (958,000) 1.  3,000) (78,000) 2.  37,000 6,133,000 (78,000) 2.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

	ESTIMATED OB	LIGATIONS (\$)	Re	ason For Change and Major Maintenance Items
State/	FY 2002 TOTAL	FY 2003 TOTAL	1.	Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).
<u>Project Name</u>	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Ohio (continued)				
North Branch of	482,000	319,000		
Kokosing River	(457,000)	(319,000)	1.	Variation in costs of water control activities, data collection and analysis/studies perform additional activities in water quality analysis and annual management compliance and utilization inspections in FY 2002.
	(25,000)	(0)	2.	None.
Paint Creek Lake	746,000	778,000		
	(610,000)	(637,000)	1.	None.
	(136,000)	(141,000)	2.	None.
Tom Jenkins Dam	231,000	240,000		
	(226,000)	(230,000)	1.	None.
	(5,000)	(10,000)	2.	None.
West Fork of Mill	476,000	461,000		
Creek Lake	(476,000)	(408,000)	1.	Perform additional activities in operation of dams, reservoirs and service facilities.
	(0)	(53,000)	2.	None.
William H. Harsha	816,000	992,000		
Lake	(770,000)	(770,000)	1.	None.
	(46,000)	(222,000)	2.	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

	ESTIMATED OB	LIGATIONS (\$)	Re	ason For Change and Major Maintenance Items
	FY 2002	FY 2003	1.	Reason for Change in Operations from FY 2002 to
State/	TOTAL	TOTAL		FY 2003 (10% +/-).
<u>Project Name</u>	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Pennsylvania				
Conemaugh River	925,000	898,000		
Lake	(822,000)	(795,000)	1.	None.
	(103,000)	(103,000)	2.	None.
Crooked Creek Lake	1,630,000	1,746,000		
	(1,297,000)	(1,293,000)	1.	None.
	(333,000)	(453,000)	2.	None.
East Branch	1,072,000	1,318,000		
Clarion River	(869,000)	(865,000)	1.	None.
Lake	(203,000)	(453,000)	2.	None.
Kinzua Dam and	1,303,000	1,231,000		
Allegheny Reservoir	(1,111,000)	(1,153,000)	1.	None.
(PA & NY)	(192,000)	(78,000)	2.	None.
Loyalhanna Lake	957,000	957,000		
•	(854,000)	(854,000)	1.	None.
	(103,000)	(103,000)	2.	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

### a. **Reservoirs** (continued)

	ESTIMATED OB	LIGATIONS (\$)	Re	ason For Change and Major Maintenance Items
24.4.4	FY 2002	FY 2003	1.	Reason for Change in Operations from FY 2002 to
State/ Project Name	TOTAL (Operations)	TOTAL (Operations)	2.	FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003
<u>Fioject Name</u>	(Maintenance)	(Maintenance)	۷.	(Threshold \$500,000).
Pennsylvania (continued)				
Mahoning Creek Lake	863,000	848,000		
_	(810,000)	(795,000)	1.	None.
	(53,000)	(53,000)	2.	None.
Shenango River	2,252,000	2,734,000		
Lake	(1,849,000)	(1,946,000)	1.	None.
	(403,000)	(788,000)	2.	None.
Tionesta Lake	2,611,000	2,032,000		
	(1,303,000)	(1,314,000)	1.	None.
	(1,308,000)	(718,000)	2.	None.
Union City Lake	221,000	245,000		
,	(208,000)	(232,000)	1.	Perform periodic inspection and draft report in FY 2003.
	(13,000)	(13,000)	2.	None.
Woodcock Creek Lake	761,000	761,000		
	(708,000)	(708,000)	1.	None.
	(53,000)	(53,000)	2.	None.

4 February 2002

204

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	LIGATIONS (\$) FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> a	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Pennsylvania (continued) Youghiogheny River	1,871,000	1,895,000		
Lake (PA & MD)	(1,481,000) (390,000)	(1,502,000) (393,000)	1. 2.	None.
Virginia				
John W. Flannagan Dam and Reservoir	1,355,000 (1,304,000) (51,000)	1,334,000 (1,294,000) (40,000)	1. 2.	None. None.
North Fork of Pound River Lake	341,000 (326,000) (15,000)	297,000 (297,000) (0)	1. 2.	None. None.
West Virginia				
Beech Fork Lake	1,055,000 (1,024,000) (31,000)	1,167,000 (1,038,000) (129,000)	1. 2.	None. None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

State/ Project Name	FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<u>Re</u> : 1. 2.	Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
West Virginia (continued)				
Bluestone Lake	6,894,000	1,149,000		
	(1,008,000)	(1,044,000)	1.	None.
	(5,886,000)	(105,000)	2.	None.
	4 000 000	4 555 000		
Burnsville Lake	1,622,000	1,555,000		
	(1,621,000)	(1,555,000)	1.	None.
	(1,000)	(0)	2.	None.
East Lynn Lake	1,680,000	1,832,000		
Last Lylli Lake	(1,593,000)	(1,670,000)	1	None.
			1.	
	(87,000)	(162,000)	2.	None.
R.D. Bailey Lake	1,474,000	1,431,000		
Samo, Lako	(1,414,000)	(1,371,000)	1	None.
	(60,000)	(60,000)	2.	None.
	(50,000)	(50,000)	۷.	NOTIC.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

State/ Project Name	FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<u>Res</u> 1. 2.	ason For Change and Major Maintenance Items  Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).  Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
West Virginia (continued)				
Stonewall Jackson	888,000	905,000		
Lake	(808,000)	(825,000)	1.	None.
	(80,000)	(80,000)	2.	None.
Summersville Lake	1,474,000	1,603,000		
	(1,433,000)	(1,402,000)	1.	None.
	(41,000)	(201,000)	2.	None.
	( ,===,	( - ,,		
Sutton Lake	2,142,000	1,777,000		
	(1,625,000)	(1,465,000)	1.	None.
	(517,000)	(312,000)	2.	None.
	<del></del>	<del></del>		
TOTAL, Reservoirs	79,976,000	73,776,000		
101712, 11000140110	(63,604,000)	(64,038,000)		
	(16,372,000)	(9,738,000)		
	( , , )	(5,: 55,555)		

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control (continued)

### b. Channel Improvements, Inspection and Miscellaneous Maintenance

The program request of \$2,775,000 provides for the annual and periodic maintenance requirements of 7 local protection projects and the inspection of completed works during the budget year.

	ESTIMATED OF	SLIGATIONS (\$)	Re	ason For Change and Major Maintenance Items
State/	FY 2002 TOTAL	FY 2003 TOTAL	1.	Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).
<u>Project Name</u>	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Kentucky				
Middlesboro	50,000	52,000		
	(50,000)	(52,000)	1.	None.
	(0)	(0)	2.	None.
Michigan				
Sebewaing River	10,000	12,000		
J	(7,000)	(7,000)	1.	None.
	(3,000)	(5,000)	2.	None.
Ohio				
Massillon	25,000	25,000		
	(0)	(0)	1.	None.
	(25,000)	(25,000)	2.	None.
Roseville	30,000	30,000		
	(0)	(0)	1.	None.
	(30,000)	(30,000)	2.	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 2. Flood Control (continued)
  - b. Channel Improvements, Inspection and Miscellaneous Maintenance (continued)

State/ Project Name	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Rea</b> 1. 2.	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
<b>Pennsylvania</b> Johnstown	65,000 (15,000) (50,000)	1,243,000 (13,000) (1,230,000)	1. 2.	Perform real property accountability assessments in FY 2002.  Repair concrete slope and miscellaneous repairs at units 1 and 2.
Punxsutawney	15,000 (15,000) (0)	13,000 (13,000) (0)	1. 2.	Perform real property accountability assessments in FY 2002. None.
<b>West Virginia</b> Elkins	18,000 (18,000) (0)	16,000 (16,000) (0)	1. 2.	Perform real property accountability assessments in FY 2002. None.
Other Projects Maintained Periodically	125,000 (0) (125,000)	0 (0) (0)		

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 2. Flood Control (continued)
  - b. Channel Improvements, Inspection and Miscellaneous Maintenance (continued)

	ESTIMATED OB	LIGATIONS (\$)	Rea	ason For Change and Major Maintenance Items
State/	FY 2002 TOTAL	FY 2003 TOTAL	1.	Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).
Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).

**Inspection of Completed Works**. The \$1,384,000 requested in FY 2003 supports inspections at flood control projects constructed by the Corps and operated and maintained by non-Federal interests. The inspections are conducted to determine the extent of compliance with legal standards and to advise local interests, as necessary, of corrective measures required to ensure that project structures and facilities will continue to safely provide flood protection benefits. These projects consist of features such as channels, levees, flood walls, drainage structures and pumping plants.

Illinois	79,000	188,000		
Indiana	165,000	168,000		
Kentucky	132,000	167,000		
Michigan	71,000	154,000		
Minnesota	7,000	14,000		
New York	100,000	281,000		
Ohio	97,000	233,000		
Pennsylvania	9,000	30,000		
Tennessee	2,000	7,000		
West Virginia	38,000	111,000		
Wisconsin	14,000	31,000		
Inspection of	714,000	1,384,000		
Completed Works	(714,000)	(1,384,000)	1.	Variation in number of projects inspected in FY 2003.
	(0)	(0)	2.	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

- 2. Flood Control (continued)
  - b. Channel Improvements, Inspection and Miscellaneous Maintenance (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	LIGATIONS (\$)  FY 2003  TOTAL  (Operations)  (Maintenance)	<ul> <li>Reason For Change and Major Maintenance Items</li> <li>1. Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).</li> <li>2. Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).</li> </ul>
TOTAL, Channel Improvements, Inspection and Miscellaneous Maintenance	1,052,000 (819,000) (233,000)	2,775,000 (1,485,000) (1,290,000)	
TOTAL - FLOOD CONTROL	81,028,000 (64,423,000) (16,605,000)	76,551,000 (65,523,000) (11,028,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

#### 3. Multiple Purpose Power

The program request of \$69,023,000 provides for the operational requirements of 10 multiple purpose projects. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials, and parts for day-to-day functioning; periodic maintenance, repairs, and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	LIGATIONS (\$) FY 2003 TOTAL (Operations) (Maintenance)	<u>Re</u> . 1. 2.	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Kentucky Barkley Dam and Lake Barkley (KY & TN)	6,916,000 (4,287,000) (2,629,000)	8,171,000 (4,198,000) (3,973,000)	1. 2.	None. Perform scheduled power plant maintenance, design for the rehabilitation of the Barkley Power Plant and refurbish tailgates and slot fillers at power plant.
Laurel River Lake	1,195,000 (624,000) (571,000)	1,542,000 (641,000) (901,000)	1. 2.	None. None.
Wolf Creek Dam and Lake Cumberland	5,948,000 (3,644,000) (2,304,000)	7,162,000 (3,213,000) (3,949,000)	1. 2.	Conduct a major hydropower rehabilitation study in FY 2002. Perform scheduled power plant maintenance, rewind hydropower generator units 4 and 6.
<b>Michigan</b> St. Marys River	19,730,000 (6,223,000) (13,507,000)	18,181,000 (5,817,000) (12,364,000)	1. 2.	None. Perform scheduled power plant maintenance including locks and service facilities, repair west center pier and upgrade pier lighting.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 3. **Multiple Purpose Power** (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b>Re</b> : 1.	Reason for Change and Major Maintenance Items Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Tennessee				
Center Hill Lake	4,796,000 (2,909,000) (1,887,000)	6,031,000 (2,837,000) (3,194,000)	1. 2.	None. Perform scheduled power plant maintenance and design for the rehabilitation of Center Hill power plant.
Cheatham Lock and Dam	4,779,000 (2,539,000) (2,240,000)	6,257,000 (3,107,000) (3,150,000)	1. 2.	Conduct a major hydropower rehabilitation study in FY 2003.  Perform scheduled power plant maintenance and dewater and repair Cheatham lock.
Cordell Hull Dam and Reservoir	3,903,000 (2,309,000) (1,594,000)	6,407,000 (2,283,000) (4,124,000)	1. 2.	None. Perform scheduled power plant maintenance, repair discharge liners and conduct project painting.
Dale Hollow Lake (TN & KY)	4,439,000 (2,632,000) (1,807,000)	5,720,000 (2,731,000) (2,989,000)	1. 2.	None. Perform scheduled power plant maintenance and replace cracked bearing blocks on spillway bridge.
J. Percy Priest Dam and Reservoir	3,268,000 (2,361,000) (907,000)	2,954,000 (2,327,000) (627,000)	1. 2.	None. None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

3. **Multiple Purpose Power** (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<b><u>Re</u></b> 1. 2.	ason For Change and Major Maintenance Items  Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).  Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).
Tennessee (continued) Old Hickory Lock and Dam	5,440,000 (3,488,000) (1,952,000)	6,598,000 (4,185,000) (2,413,000)	1. 2.	Conduct a major hydropower rehabilitation study in FY 2003. Perform scheduled power plant maintenance.
TOTAL - MULTIPLE PURPOSE POWER	60,414,000 (31,016,000) (29,398,000)	69,023,000 (31,339,000) (37,684,000)		

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

#### 4. Protection of Navigation

The program request of \$4,986,000 provides for accomplishing project condition surveys for projects where maintenance is not scheduled in the budget year. It also provides for Great Lakes water control monitoring.

	ESTIMATED OBLIGATIONS (\$)		Reason For Change and Major Maintenance Items		
Otatal	FY 2002	FY 2003	1.	Reason for Change in Operations from FY 2002 to	
State/ Project Name	TOTAL (Operations)	TOTAL (Operations)	2.	FY 2003 (10% +/-). Major Maintenance Items Budgeted in FY 2003	
<u>,</u>	(Maintenance)	(Maintenance)		(Threshold \$500,000).	

**Project Condition Surveys**. The \$757,000 requested in FY 2003 supports hydrographic surveys, inspections, and studies to determine the condition of navigation channels that do not have any other maintenance work included in the budget request and disseminate the information to users of the projects. For the projects that do not require maintenance, surveys are performed at many of them in order to determine the degree of sedimentation so that users can be advised of channel conditions and future maintenance can be scheduled.

Illinois	42,000	30,000		
Indiana	43,000	55,000		
Michigan	188,000	234,000		
Minnesota	17,000	22,000		
New York	238,000	252,000		
Ohio	85,000	90,000		
Pennsylvania	17,000	18,000		
Wisconsin	45,000	56,000		
Project Condition	675,000	757,000		
Surveys	(675,000)	(757,000)	1.	Variation in number of projects surveyed in FY 2003.
•	(0)	(0)	2.	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

4. **Protection of Navigation** (continued)

	ESTIMATED OB	ED OBLIGATIONS (\$)		ason For Change and Major Maintenance Items
State/	FY 2002 FY 2003 TOTAL TOTAL		1.	Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).
Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	2.	Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).

**Surveillance of Northern Boundary Waters**. The \$4,326,000 requested in FY 2003 supports meeting U.S. obligations under provisions of boundary water treaties and other international agreements. Data collection includes current velocity measurements, presence and intensity of ice, water levels, land use patterns and estimating potential damages caused by extreme levels. This information can be used to enhance water level forecasts, develop crises response plans, and provide advance warning to area residents and waterway users of impending floods or ice jams.

Illinois	75,000	111,000		
Indiana	165,000	130,000		
Michigan	2,493,000	2,507,000		
Minnesota	236,000	238,000		
New York	584,000	595,000		
Ohio	171,000	175,000		
Pennsylvania	71,000	72,000		
Wisconsin	495,000	498,000		
Surveillance of	4,290,000	4,326,000		
Northern Boundary	(4,290,000)	(4,326,000)	1.	None.
Waters	(0)	(0)	2.	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

4. **Protection of Navigation** (continued)

State/ <u>Project Name</u>	ESTIMATED OB FY 2002 TOTAL (Operations) (Maintenance)	FY 2003 TOTAL (Operations) (Maintenance)	<ul> <li>Reason For Change and Major Maintenance Items</li> <li>1. Reason for Change in Operations from FY 2002 to FY 2003 (10% +/-).</li> <li>2. Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000).</li> </ul>
TOTAL - PROTECTION OF NAVIGATION	4,965,000 (4,965,000) (0)	5,083,000 (5,083,000) (0)	
GRAND TOTAL - GREAT LAKES AND OHIO RIVER DIVISION	333,598,000 (170,362,000) (163,236,000)	349,243,000 (171,814,000) (177,429,000)	